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Contents

Editorial

Dr Abdulrazak Abyad

This is a special issue of the journal that includes a paper reflecting collaboration in the Middle East and North Africa Region. This is clear through the paper included and the abstract of the conference in Tunisia

Saberi , et al., looked at the Reliability and Validity of the Persian Version of Widow's Lived Experience Inventory, 90-Item among Iranian Divergent Ethnic Groups. The authors stressed that Widowhood is the end stage of married life that is accompanied by emotional and physical stresses. Their lived experiences of widows against widowhood challenges. The aim of study was to develop and extract the psychometric properties of the Persian version index of widow's lived experience (IWLE, 90-Items). A total of 493 widows were randomly selected from six ethnic groups across Iran. Data collection was then carried out using WRS and demographic questionnaire. The scale structure was evaluated by assessing goodness of fit in confirmatory factor analysis (CFA). Internal consistency was also assessed by Cronbach's alpha and the optimal cut-off points were calculated by calculating the value of the area under the ROC. Data analysis was then carried out using IBM-SPSS Ver. 24 and AMOS Ver.24. The construct validity of the IWLE was assessed using CFA and the results showed that the six subscales explained a total of 74.45% of the variance. IWLE scale exhibited excellent reliability (α=0.97) for the whole scale (ICC = 0.96) ($p<0.001$). The researcher extracted five components, including Economic, Social, Intergenerationality, Remarriage, and Health along with 11 subdomains and confirmed by goodness of fit indices. The authors stated that the results revealed that the Persian version of IWLE is a valid and reliable tool that can be used by other researchers to measure widows' lived experiences in the Iranian and Middle Eastern contexts.

The second part of the issue is the abstract booklet of the 4th National congress of Geriatrics and 4TH Euro Med Geriatric meeting that took place in Tunisia between 20 to 21 May , 2023. The theme of the conference was Geriatric emergency. The conference is organized by the Tunisian society of geriatrics in collaboration with International Institute of Ageing INIA , and Internal association of gerontology IAGG and Middle East and North Africa Association of Ageing and Alzheimer's MENAAA and Murghab Academy for Medicine of Ageing.

Original Contribution / Clinical Investigation

Reliability and Validity of the Persian Version of Widow's Lived Experience Inventory, 90-Item among Iranian Divergent Ethnic Groups

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ABSTRACT

Background: Widowhood in the end stage of married life is accompanied by emotional and physical stresses. The lived experiences of widows entail many challenges. The aim of the study was to develop and extract the psychometric properties of the Persian version index of widow's lived experience (IWLE, 90-Items).

Methods: A total of 493 widows were randomly selected from six ethnic groups across Iran. Data collection was then carried out using WRS and demographic questionnaire. The scale structure was evaluated by assessing goodness of fit in confirmatory factor analysis (CFA). Internal consistency was also assessed by Cronbach's alpha and the optimal cut-off points were calculated by calculating the value of the area under the ROC. Data analysis was then carried out using IBM-SPSS Ver. 24 and AMOS Ver.24.

Results: The construct validity of the IWLE was assessed using CFA and the results showed that the six sub-scales explained a total of 74.45% of the variance. IWLE scale exhibited excellent reliability (α=0.97) for the whole scale (ICC = 0.96) (p<0.001). The researcher extracted five components, including Economic, Social, Intergenerationality, Remarriage, and Health along with 11 subdomains and confirmed by goodness of fit indices.

Conclusions: The results revealed that the Persian version of IWLE is a valid and reliable tool that can be used by other researchers to measure widows' lived experiences in the Iranian and Middle Eastern contexts.

Keywords: Widows, Lived experience, Older and middle-aged women, Widowhood, Psychometrics, Iran, Translation, Factoranalysis.

Introduction

Advances in science and medicine have led to increased human life expectancy and in the elderly population (1, 2). The population aged 60 years or over will double from 11% in 2006 to 22% in 2050 around the globe (3). The number of middle-aged people also increase during the aging process. Middle age is one of the most sensitive stages of life and studies have defined midlife to include between the ages of about 40 and 60 (4). This aging process will be faster in developed countries (5). The elderly population in Iran is predicted to reach more than 26 million by 2050, and more than 2% of the whole population of the country (3). The increase in the elderly population is especially true among women (6). Population aging leads to new difficult and fundamental challenges i.e. structures related to labour, health care, social security, a challenge to keep older people integrated into society and to provide ways of participation, but it is possible to overcome these challenges (7). The lived experiences and challenges of family members vary across the cultural contexts of societies (8-10). One of the most important challenges of old age is the death of a partner and widowhood (11, 12). Although the proportion of widows/widowers is increasing steadily with age, the rate of widow population growth is much higher than that of widowers. Widowhood is recognized as an issue that affects women, and women live longer than men in developed countries and some developing countries, reflecting the high male mortality rate (13). The word widow(er) refers to a person who has lost his/her spouse and has not remarried (14). Widowhood is one of the most stressful transitions facing people (15-17). Allison et al. found that widowhood increased the risk of death by up to 48%. It leads to emotional distress and issues related to adapting to new living conditions (18). Recent studies have also shown that engagement in mental activities moderates the impact of widowhood and suggested further future studies on about other factors such as changes in physical and mental health, and intergenerational support for older children during widowhood (11, 12, 14). Since there has been no study in some societies like Iran on the effects of widowhood on widows despite the development of recent education for women and with a view to cultural differences and different historical contexts, researchers should specifically investigate problems of widowed women during their widowhood (19, 20). Therefore, it is necessary to investigate the problems of middle aged and old women who are experiencing problems during their widowhood in divergent cultures. To recognize the problems of widows or even to protect women who lose their husbands in the face of the problems and challenges, it first needed a valid tool to identify and categorize these problems. Little attention has been paid to the lived experience using a practical tool and questionnaire, and the existing tools focus on the psychological dimensions of widows/widowers (10, 20). After searching published papers in Google Scholar, DOAJ, PubMed, and Scopus from January 2019 to May 2023 , there is no tool to accurately assess the complications and challenges of widowhood in a widow's life. Therefore, the aim of the present study was to design and develop a tool for examining the lived experience of middle-aged and elderly widows, entitled psychometric indices and determination of cut-off points of the IWLE, 90-items in widows of divergent ethnicities of Iran.

Materials and Methods

In a psychometric research, the present study extracted psychometric properties of the 82-item questionnaire aimed at identifying the socioeconomic and individual problems of widows and widowers by Saikia (1995) who designed the primary version (21). Initially, the original version of the above questionnaire was prepared and the instrument was translated based on international translation standards. During the translation and localization process, the original version was first translated into Persian by two individuals and the final version was edited by a panel of researchers. To ensure the authenticity of the translation, one of the English language professors has translated the Persian version obtained in the previous steps back into English again (backward translation). The English version was matched with the original English version of the expert panel (22). Considering the overlap of some questions of the questionnaire, Questions 6, 7 and 79, 80 were merged into two questions due to face validity. Then, according to the review of recent published papers on women's health and widowhood (6, 7, 11, 14, 17, 18, 21, 23-29), 12 questions on the health of widows were added to it, and its content validity ratio was confirmed with a content validity index (CVI) greater than 0.86 (2 items were finally removed in the confirmatory factor analysis process). The final version of the 90-item questionnaire was reviewed by the eight members of the expert panel (Fleiss' Kappa ≥ 0.80). The items were answered using a 5-point Likert scale ranging from "Completely disagree" (1) to "Completely agree" (5). Some items were scored reversely. Overall, the possible score range was 90 to 450 and the internal consistency of the whole tool was calculated 0.97 using Cronbach's alpha (split-half, 0.96 and 0.94). Cronbach's alpha scores for the eleven subscales were as follows: 1. Cost (0.74); 2. Subsistence (0.68), 3. Social perception (0.71), 4. Social norm (0.80), 5. Social restriction (0.78), 6. Generational support (0.75), 7. Generational connection (0.69), 8. Social obstacles (0.81), 9. Individual obstacles (0.85), 10. Neglecting one's health (0.75), and 11. Health threats (0.75). The reliability of the whole tool was acceptable (ICC=0.96). Initially, the sample size of the study was calculated as 493 Iranian middle-aged and elderly widows based on cross sectional and psychometric studies with 95% post hoc power (1-beta), difference index of 0.001 between positive and negative groups in the study of Lee et al. (2018) (18) using NCSS-PASS software ver.15 (30). After approval of the research by the ethic committee of Shiraz University of Medical Sciences (N0.: IR.SUMS. REC-97-01-04-19129), the researcher collected the data with the demographic and health index of widows in 2022 on two sample groups of 493 middle-aged (282) and elderly (211) Iranian widows in the nine Iranian provinces with the most ethnic diversity such as Kurds, Turks, Baluchis, Fars, Arabs, and Turkmen at two time periods. Proportional quota sampling was used to select samples from each urban and rural area according to the census of widows aged 50 years and above as well as the latest National Population Data of Iran in 2022 (31). Middle-aged and older widows were selected from comprehensive health centers affiliated to the Ministry of Health using national integrated health system and were invited to complete the information. Participants were given explanations on confidentiality of the personal information, voluntary participation and a written informed consent form was then obtained. Inclusion criteria included willingness to participate in the study, female gender, age over 50, being a widow, and having the

appropriate mental ability to answer the questionnaire upon results of MMSE. Questionnaires were completed through face-to-face interviews by trained people with communication skills. On average, questionnaires were completed between March 15 and September 15, 2023.

Statistical Analysis
Considering the normal distribution of data, initial analysis and exploratory factor analysis (EFA) were performed in SPSS Ver. 25 and then to determine the psychometric indices and cut-off points of the questionnaire, ROC curve, confirmatory factor analysis (CFA), and goodness of fit indices were performed in AMOS software ver.24. The scoring range of each subscale and the total score of the tool were corrected by using the tool in the real environment and performing psychometric analysis, factor analysis, and placing the cut-off points (32-33).

Results
The mean ± SD of participants' age was 65.77 ± 9.84 years. A total of 42.6% of them were illiterate (211), 93.1% were housewives (459), 93% had children, 79.2% (390) had been widows for over 10 previous years, and 42.1% were currently living alone (208).

Results of Exploratory Factor Analysis
For EFA, Bartlett's test of sphericity and sample adequacy test were performed using Kaiser-Meyer-Olkin (KMO) (KMO = 0.908, Bartlett's Test of Sphericity = 8759.06, df =132, P≤ 0.000). The factor analysis was performed using EFA & CFA methods in two separate populations. This means that the questionnaire has subscales and hidden common traits. Factor extraction was performed by principal component analysis (PCA) method with seven Varimax rotations and Kaiser normalization exhibited an eigenvalue higher than 74% (completely optimal), and out of 90 items of the tool, the following five main factors along with eleven subscales were extracted: 1. Cost (mean factor loading of 0.7316), 2. Subsistence (mean factor loading of 0.6510), 3. Social perception subscale (mean factor loading of 0.715), 4. Social norm (mean factor loading of 0.597), 5. Social restriction (mean factor loading of 0.578), 6. Generational support (mean factor loading of 0.734), 7. Generational connection (mean factor loading of 0.727), 8. Social obstacles (mean factor loading of 0.582), 9. Individual obstacles (mean factor loading of 0.688), 10. Neglecting one's Health (mean factor loading of 0.557), 11. Health threats (mean factor loading of 0.546) (See Supplemental Table).

Or go to:
www.me-jaa.com/December 2023/Supplemental Table.pdf
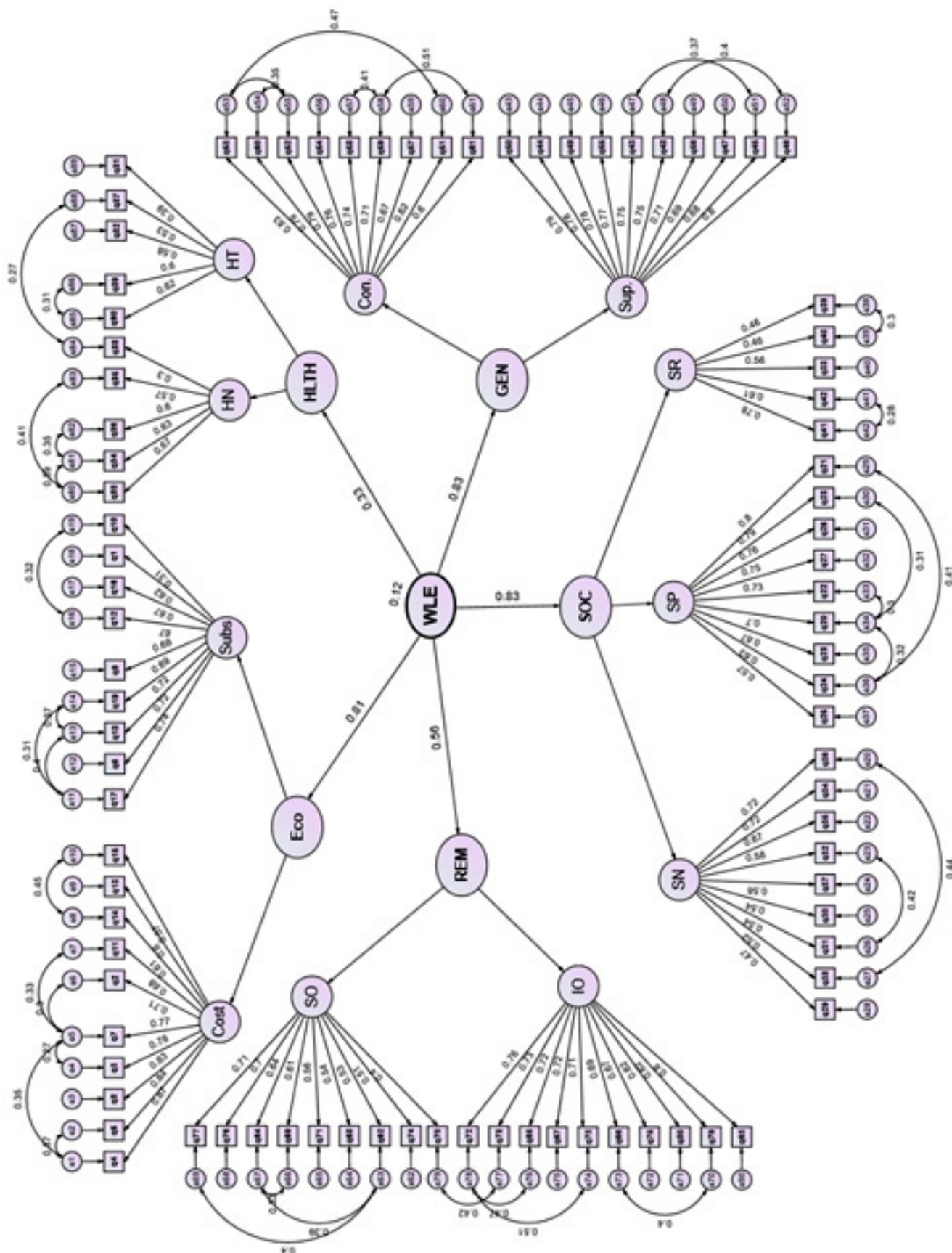
Results of Confirmatory Factor Analyses

After accepting the factor loadings (≥ 0.20) and distributing factors in the EFA, confirmatory factor analysis (CFA) was performed using generalized least squares (GLS), which confirmed the model (≥90%). Also, the most important goodness-of-fit indices of the model are listed in Table 1 (34, 35).

Table 1: The goodness of fit indices of extracted model for the IWLE 90-Items (n = 493)

Fit Indices	x^2	df	x^2/df≤3	RMSEA	AGFI	GFI	TLI	CFI	NFI
Values	21.374	10	2.137	0.048	0.90	0.90	0.91	0.91	0.90

Goodness of Fit Indices: Adjusted Goodness of Fit Index (AGFI), Goodness of Fit Index (GFI), Root Mean Square Error of Approximation (RMSEA), Lewis Index (TLI), Confirmatory Fit Index (CFI), Bentler & Bonnet's Normed Fit Index (NFI),.

The results of the above table indicate the good fit of the factor distribution in the internal distribution model of the questionnaire and good quality of its factor structure. Therefore, the results of the above tool could be trusted for measuring the widows' lived experience. However, CFA led to identification of 11 hidden variables including cost, subsistence, social perception, social norms, social restriction, generational support, generational connections, social obstacles, individual obstacles, and health threats (Figure 1), which were considered as subsets of the main indicators of Economic, Social, Intergenerationality, Remarriage, and Health.

Figure 1: Path Diagram for the Confirmatory Factor Analysis of Five Domains of the IWLE, 90-Items

Chi2 = 21.374, df = 10, n = 463, chi2/df = 2.137, RMSEA = 0.048, GFI = 0.90, TLI = 0.91, AGFI = 0.90, NFI = 0.90, CFI = 0.91.

Results of ROC analysis for determination of cut-off points

Table 3 shows AUC under the ROC curve, sensitivity, specificity, and cut-off points of IWLE and its five subscales. As the above table shows, the cut-off point that best differentiates among the widows was 188.5. The sensitivity, specificity, and AUC of the above point were 100%, 77.8%, 0.72.3, respectively (95% CI: 0.683-0.763 (P= 0.000). Similarly, the resulting cut-off point was equal to 16.5 for agency, 10.5 for social support, 11.5 for living in the present, 10.50 for helping others, 12.5 for integration, and 10.5 for the outlook (P≤ 0.001).

Table 3. AUC, Sensitivity, Specificity, and Youden's Index for Possible Cut-off Points of IWLE & its Domains

Test Result Variables	Subdomain	AUC	95% CI Lower Bound	95% CI Upper Bound	Mean (SD)	P*	Cut-off Point (z)	Sensitivity	Specificity	Youden's J	D Value	DIFF
Economic	Cost	.682	.538	.727	26.68±11.105	.000	25.50	1.000	.606	.760	.058	.240
	Subsistence	.627	.578	.776	20.05±8.890	.000	16.50	1.000	.620	.554	.190	.436
	Total	.647	.603	.691	47.15±18.466	.001	41.50	1.000	.664	.760	.058	.240
Social	Norms	.755	.713	.797	23.17±8.293	.000	17.50	1.000	.760	.662	.114	.338
	Perception	.630	.584	.676	18.66±7.951	.000	19.50	1.000	.554	.695	.093	.305
	Restriction	.570	.495	.745	10.57±4.045	.000	10.50	1.000	.760	.704	.088	.296
	Total	.653	.608	.699	52.83±17.323	.000	47.50	1.000	.662	.629	.138	.371
Intergenerationality	Connection	.665	.613	.716	20.51±8.634	.000	16.50	1.000	.695	.710	.084	.290
	Support	.647	.584	.711	23.58±9.890	.000	20.50	1.000	.704	.770	.053	.230
	Total	.691	.644	.738	47.57±18.469	.000	38.50	1.000	.629	.615	.148	.385
Remarriage	Social Obstacles	.652	.603	.702	21.71±8.091	.000	18.50	1.000	.710	.613	.150	.387
	Individual Obstacles	.740	.680	.800	24.51±7.085	.000	20.50	1.000	.770	.650	.123	.350
	Total	.700	.656	.745	45.13±14.080	.001	38.50	1.000	.615	.674	.105	.325
Health	Neglect	.671	.568	.774	11.32±3.241	.000	11.50	1.000	.613	.778	.049	.222
	Threats	.717	.632	.803	13.58±3.046	.000	12.50	1.000	.650	.760	.123	.240
	Total	.573	.504	.642	25.13±5.069	.001	24.50	1.000	.674	.554	.190	.436
IWLE		.723	.683	.763	218.91±55.056	.000	188.50	1.000	.778	.778	.049	.222

a. Two-sided Chi-squared test, P ≤ .05. Abbreviations: AUC= area under curve; CI = confidence interval; DIFF = abs (sensitivity– specificity); D Value or K-Index = Sqrt (((1-Sensitivity) ² + (1-Specificity) ²) (35-36).

Discussion

The results of the present study showed that the questionnaire used in the study has satisfactory validity and reliability for measuring the lived experiences of middle-aged and elderly Iranian widows. The present study was conducted on 493 middle-aged and elderly Iranian widows in 2023. The tool was highly reliable in terms of CVI, Fleiss' kappa index, Cronbach's alpha, and ICC value. Factor distributions were extracted using PCA and Varimax rotation during EFA. Five main subscales and eleven sub-subscales were identified from the main variable, lived experience of widowhood and named using the Amos software ver. 11. The lived experience of widowhood tool can be divided into five main indicators of health, subsistence, social, generational connects, and remarriage and then subdivided into the following 11 subscales: cost, subsistence, social perception, social norm, social restriction, generational support, generational communication, social obstacles, individual obstacles, neglecting one's health, and health threats. Widowhood experience may be different for men and women in all fields due to differences in gender norms and marriage traditions (37). One notable difference is that widows are less likely to remarry than widowers (38). As shown by the present study, reduced chance of remarriage in widows may be due to individual and social barriers. Therefore, widowhood is often recognized as an issue affecting women. As women become widows, they undergo a lot of responsibilities and their vulnerability is elevated (26). Such changes are likely to be particularly challenging for widows who undergo traditional marriage ceremonies where men and women are assigned special tasks by gender and have little knowledge of the duties and responsibilities of their spouses (19). For example, family can experience poverty following the husband's death in societies where he is the sole breadwinner (39). As a result, a widow not only loses some of her economic or social support after the death of her husband, but also can experience considerable loneliness and hardship in her daily life (5, 6, 12). Post-widowhood financial security and social security were considered as the most important causes of anxiety after their spouse's death (40). Widows may face these problems partly due to social and cultural issues. The present study questionnaire appropriately classified the social and cultural dimensions, which may involve a widow, into three subscales of social perception, social norms, and social restriction. Recent studies have shown that support of older child makes a significant difference to the economic and social well-being status of widows. Overall, boys have been recognized as a major source of support, however, Mahindra et al. have found that girls help improve the lives of their mothers in other ways (26). Therefore, generational support and generational connections during widowhood was another dimension measured in the present study. On the other hand, economic, social, and psychological benefits of marriage affect people's health. Widowhood poses significant stresses when resources are suddenly changed and may have negative effects on one's health (37). In the present study, widowhood-related health problems were divided into two dimensions: neglecting one's health and health threats.

Considering the importance of the challenges during widowhood and the need to identify them, the present study analyzed an appropriate tool that can accurately measure widowhood-related problems. Considering the high level of validity of the instrument of the present study, and also the fact that the participants of the present study were collected from several provinces of Iran with different cultures and lifestyles, the results of the present study can be generalized to the population of middle-aged and elderly Iranian widows. Therefore, the present questionnaire can be generally effective in health screenings and psychological diagnoses, social work assessments in elderly clinics, healthcare centers and welfare organizations across the country. The present study had limitations such as inaccessibility to specific elderly groups such as the elderly residing in nursing homes. Furthermore, given the large number of questions, examiners needed more precision and time to complete the questionnaire. Another limitation of the present study was the lack of studies that use different tools to measure the complications of widowhood in different groups, especially the elderly, so, the researcher faced limited scientific and valid resources.

Conclusion

The results of the present study showed that 90-item IWLE has satisfactory validity and reliability and the questionnaire can illustrate Iranian middle-aged and older widows' challenges. I also recommend to standardize this tool in other countries considering cross-cultural differences.

Authors' Contributions

NP & LFS has contributed to the design, performed the interviews, and written the Introduction section; AAs and AAb has supervised the program and written the sections of Methods, Results, also, has written Discussion & Conclusion parts. All authors have approved the final manuscript as well.

Ethical Considerations

Ethical matters e.g. plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been totally observed by the authors. All the participants received verbal explanation about the study objectives and procedures and then signed written informed consents for taking part in the study. The participants were also reassured about the anonymity and confidentiality of their information. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments including informed consent and confidentiality of all personal information.

Patient Consent

Written and verbal consent of patients was obtained before participating the study.

Conflict of Interests

The authors declare that they have no competing interests.

References:

1. Park SH, Han KS, Kang CB. Effects of exercise programs on depressive symptoms, quality of life, and self-esteem in older people: a systematic review of randomized controlled trials. Applied nursing research: ANR. 2014;27(4):219-26. DOI: 10.1016/j.apnr.2014.01.004.

2. Tarugu J, Pavithra R, Vinothchandar S, Basu A, Chaudhuri S, John K. Effectiveness of structured group reminiscence therapy in decreasing the feelings of loneliness, depressive symptoms and anxiety among inmates of a residential home for the elderly in Chittoor district. International Journal of Community Medicine and Public Health. 2019;6(2):847-54. DOI: 10.18203/2394-6040.ijcmph20190218.

3. Asadollahi A, Rezaei P, Faraji N. Aging Successfully: The Impact of Spirituality on Social Participation in the Process of Living Getting Old. Middle-East Journal of Scientific Research. 2013;15(7):920-5. DOI: 10.5829/idosi.mejsr.2013.15.7.11371.

4. Jones E, Oka M, Clark J, Gardner H, Hunt R, Dutson S. Lived experience of young widowed individuals: A qualitative study. Death studies. 2019;43(3):183-92. DOI: 10.1080/07481187.2018.1445137.

5. Yasien-Esmael H, Rubin SS, Eshel Y. Widowhood in the Israeli Arab Muslim Society. OMEGA-Journal of Death and Dying. 2017. DOI: 10.1177/0030222817737229.

6. Yasien-Esmael H, Eshel Y, Rubin SS. Bereavement of Israeli Arab Muslim widows: Determinants of adjustment and supporting attributes. Death studies. 2018;42(1):52-62. DOI: 10.1080/07481187.2017.1326542.

7. Bloom DE, Boersch-Supan A, McGee P, Seike A. Population aging: facts, challenges, and responses. Benefits and compensation International. 2011;41(1):22.

8. Asadollahi A, Najafi A. Do risk factors increase measurement of hepatitis B, C signs and HIV-AIDS among middle-aged and older IDUs in southwest Iran? Drugs and Alcohol Today. 2019. DOI: 10.1108/DAT-05-2018-0026.

9. Ghahremani L, Nazari M, Changizi M, Kaveh MH. High-risk behaviors and demographic features: a cross-sectional study among Iranian adolescents. International journal of adolescent medicine and health. 2019. DOI: 10.1515/ijamh-2018-0212.

10. Garcini LM, Brown RL, Chen MA, Saucedo L, Fite AM, Ye P, et al. Bereavement among widowed Latinos in the United States: A systematic review of methodology and findings. Death studies. 2019:1-12. DOI: 10.1080/07481187.2019.1648328.

11. Kahler J, Papa A, Epstein E, Levin C. Attributions About Bereaved Spouses: Testing the Myths of Coping with Loss. OMEGA-Journal of Death and Dying. 2019, Dec. 1: Online First, DOI: 10.1177/0030222819890974

12. MacLeod R, Wilson DM, Crandall J, Austin P. Death Anxiety among New Zealanders: The Predictive Roles of Religion, Spirituality, and Family Connection. OMEGA-Journal of Death and Dying. 2019;80(1):3-19. DOI: 10.1177/0030222817724307.

13. Fiore J. A Systematic Review of the Dual Process Model of Coping with Bereavement (1999–2016). OMEGA-Journal of Death and Dying. 2019 Dec. 12: Online First, DOI: 10.1177/0030222819893139.

14. Sekgobela G, Peu M, van der Wath A. "They brought my smile back": A phenomenological description of widows' experiences of psychosocial support. Death studies. 2019:1-10. DOI: 10.1080/07481187.2019.1671542.

15. Bennett KM, Chao Q, Roper L, Lowers V. The deceased has left; the alive has to move on: Experiences of Chinese Widows in the UK. Death studies. 2018;42(8):498-507. DOI: 10.1080/07481187.2017.1387617.

16. Choi KH, Vasunilashorn S. Widowhood, age heterogamy, and health: the role of selection, marital quality, and health behaviors. The journals of gerontology Series B, Psychological sciences and social sciences. 2014;69(1):123-34. DOI: 10.1093/geronb/gbt104.

17. Lee Y, Chi I, L AP. Widowhood, leisure activity engagement, and cognitive function among older adults. Aging & mental health. 2019;23(6):771-80. DOI: 10.1093/geroni/igy023.642.

18. Sullivan AR, Fenelon A. Patterns of widowhood mortality. Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 2013;69(1):53-62. DOI: 10.1093/geronb/gbt079.

19. Perrig-Chiello P, Spahni S, Höpflinger F, Carr D. Cohort and Gender Differences in Psychosocial Adjustment to Later-Life Widowhood. The Journals of Gerontology: Series B. 2015;71(4):765-74. DOI: 10.1093/geronb/gbv004.

20. Edwards TP, Yopp JM, Park EM, Deal A, Biesecker BB, Rosenstein DL. Widowed parenting self-efficacy scale: A new measure. Death studies. 2018;42(4):247-53. DOI: 10.1080/07481187.2017.1339743.

21. Saikia LR. An in depth study of the problems of educated and uneducated widows of greater Guwahati with special emphasis on social economic and personal problems. 1995.

22. Behling O, Law KS. Translating questionnaires and other research instruments: Problems and solutions: Sage; 2000. DOI: 10.4135/9781412986373.

23. Carr D, Bodnar-Deren S. Gender, aging and widowhood. International handbook of population aging: Springer; 2009. p. 705-28. DOI: 10.1007/978-1-4020-8356- _32.

24. de Vries B, Utz R, Caserta M, Lund D. Friend and family contact and support in early widowhood. Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 2013;69(1):75-84. DOI: 10.1093/geronb/gbt078.

25. Lenette C. 'I am a Widow, Mother and Refugee': Narratives of Two Refugee Widows Resettled to Australia. Journal of Refugee Studies. 2013;27(3):403-21. DOI: 10.1093/jrs/fet045.

26. Mohindra KS, Haddad S, Narayana D. Debt, shame, and survival: becoming and living as widows in rural Kerala, India. BMC international health and human rights. 2012;12(1):28. DOI: 10.1186/1472-698X-12-28.

27. Ndlovu T. Silent victims or agents of change? An exploration of the lived experiences of African widows confronted with the practice of customary law of succession and inheritance in South Africa 2016.

28. Perrig-Chiello P, Spahni S, Höpflinger F, Carr D. Cohort and gender differences in psychosocial adjustment to later-life widowhood. Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 2015;71(4):765-74. DOI: 10.1093/geronb/gbv004.

29. Van den Hoonaard DK. The widowed self: The older woman's journey through widowhood: Wilfrid Laurier Univ. Press; 2006.

30. Hintze J. PASS 15. NCSS, LLC. Kaysville, Utah, USA. 2019.

31. Statistical Center of Iran. (2019). The 2016 National Population and Housing Census. Retrieved from: https://www.amar.org.ir/english/Population-and-Housing-Censuses.

32. Kallner A. Formulas. Laboratory Statistics: Elsevier; 2018. p. 1-140.

33. AMOS for Windows 24.0 [Computer software]. (2016). Chicago ISI.

34. Kallner A. Laboratory statistics, handbook of formulas and terms. Chemistry International. 2014;36(4):23-.

35. John O, Benet V. Measurement: Reliability, construct validation, and scale construction. Handbook of research methods in social and personality psychology. 2012.

36. John OP, Benet-Martĺnez V. Measurement. In: Reis HT, Judd CM, editors. Handbook of Research Methods in Social and Personality Psychology. 2nd ed. Cambridge: Cambridge University Press; 2014. p. 473–503. DOI: 10.1017/CBO9780511996481.023.

37. Perkins JM, Lee H-y, James KS, Oh J, Krishna A, Heo J, et al. Marital status, widowhood duration, gender and health outcomes: a cross-sectional study among older adults in India. BMC Public Health. 2016;16(1):1032. DOI: 10.1186/s12889-016-3682-9.

38. Bennett KM, Arnott L, Soulsby LK. You're not getting married for the moon and the stars: The uncertainties of older British widowers about the idea of new romantic relationships. Journal of Aging Studies. 2013;27(4):499-506. DOI: 10.1016/j.jaging.2013.03.006.

39. Chandrakant Jamadar DSPM, Ashok Holkar. Quality of Life among Widows. The International Journal of Indian Psychology. 2015;3(1). DOI: 10.25215/0301.172.

40. Ryckebosch-Dayez AS, Zech E, Mac Cord J, Taverne C. Daily life stressors and coping strategies during widowhood: A diary study after one year of bereavement. Death Studies. 2016 Sep 13;40(8):461-78. DOI: 10.1080/07481187.2016.1177750.

Dear colleagues and friends,

It is a matter of great happiness that even while the cloud of the pandemic hovers above us, we are successfully organizing the most prestigious event of the Tunisian Geriatric Society (STG), CNG, 2023.

We hosted recently the Annual Geriatric Meeting STG and the fourth Euro-Geriatric Meeting , which has been scheduled in Hammamet city , Tunisia from 20-21 May 2023. With the support of the International Institute on Ageing (INIA). The International Congress, was an opportunity for many well-known geriatrics, gerontologists, policy decision-makers, professional activists, and researchers to share recent discoveries and study results.

The Congress theme: "Geriatric Emergencies", the program was developed by a very dynamic scientific committee and has the goal to associate the pioneering in the field of geriatrics and gerontology. It was an opportunity to meet colleagues from European countries and to share experiences. This meeting provides updates on both clinical and fundamental in geriatric and gerontology, a panel and workshops to improve the care of seniors and a multidisciplinary forum for practitioners to present and discuss the practical challenges and the solutions adopted.

I thank each and every one who has been instrumental in Organizing this Conference, from all members of the STG and all the member of the Organizing Committee.

We are extremely proud of the official publication of the abstract book as a special issue of the Middle East Journal of Age and Ageing (ME-JAA). The Editor-in-Chief, Dr. ABYAD Abdulrazak, continues to guide the prestigious scientific journal that enjoys a place at the forefront of geriatric and gerontology science and play an active role in the development of academic standards and medical practice in the Arab region through the participation and the support of regional scientific events. The full program and all abstracts for oral and posters presentations can be found in this issue.

On behalf of the STG, I would like to thank you for your participation. We appreciate your interest in this inspiring, and enjoyable meeting.

Pr Sonia Ouali Hammami
President of the Tunisian Geriatric Society
President of the Maghreb Academy for Medicine of Ageing

Index of Abstracts

Mortality from digestive cancers in Tunisian elderly, 2020

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Abstract

Introduction: The demographic transition was followed in Tunisia by an increased prevalence in most chronic diseases, such as diabetes, high-blood pressure and cancers. The study aim was to estimate the proportional mortality related to digestive tract cancers in elderly aged over 65 in Tunisia.

Methods: Descriptive study based on data from the national information system on causes of death for 2020. Data were collected from medical death certificates (MDC) received by the National Institute of Health. Causes of death have been coded according to the International Classification of Diseases (ICD-10). not included, were deaths where cancers were mentioned as contributing factors to death, but were not the main underlying cause of death. Cspro and SPSS softwares were used for data entry and analysis.

Results: In total 27,783 MDC were enrolled, including 3,529 deaths attributable to cancers and accounting for (12.7%) of all deaths in elderly. Almost 24% of cancer deaths were attributable to digestive cancers. The sex ratio (Male/Female) of our study population was 1.3, and the mean age was 76.4 ± 8.1 years. Leading digestive cancers were as follows: colorectal (35.8%), pancreas (23.2%), liver (22.4%), stomach (16%), and esophagus (2.5%).

Conclusion: Strengthening secondary prevention measures mainly screening in general and high-risk populations are highly recommended to improve survival rates and to ensure a better quality of life for elderly individuals.

Diabetic ketoacidosis in elderly patients in an emergency department: Epidemiology, Diagnosis, and Management

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Abstract

Introduction: Diabetic ketoacidosis is an acute complication of diabetes which requires In elderly patients an early and urgent management .

Materials and Methods: This was a retrospective study on diabetic patients over the age of 65 who were hospitalized in the vital reception room of the emergency department of the Gabes University Hospital for moderate to severe ketoacidotic decompensation (ACD) during the 24-month period from January 1, 2020, to December 31, 2022.

Objective: The objective of this study was to describe the epidemiological, clinical, therapeutic, and prognostic characteristics of elderly patients admitted for severe or moderate ACD.

Results: Our study included 12 patients with a mean age of 74.5 ± 6.8 years. The sex ratio was 0.33. 50% patients had hypertension and 16.7% had associated heart disease. The average duration of diabetes was 20.17 ± 5.8 years. Only 16.7% patients had a previous ketoacidotic decompensation. The time between the onset of symptoms and their consultation in the emergency department was more than 48 hours in 41.7%.

The clinical examination at admission revealed: blood pressure ranging from 100/50 to 200/110 mmHg and a heart rate ranging from 35 to 110 bpm. Fingerstick blood glucose ranged from 3.8 to 7 g/dL with glycosuria of two crosses in 41.5%, three crosses in 41.7% and ketonuria, three crosses in 58.3% of cases. The severity criteria were found in 13% : pH <7.1 in 1.44% and HCO3- <10mEq/L in 11.6%.

5.7% of patients had severe renal failure. The factors of decompensation identified were: an infection (58.3%) ; poor therapeutic compliance (41.7%), and deviation from the diet (16.6%). The evolution was marked by septic shock in one case. The patients were hospitalized in the medicine department (41.7%), the intensive care unit (25%). The severity score in the intensive care unit, Apache II calculated was between 9 and 26, with a mortality risk between 9.9% and 57%.

Conclusion: Diabetic ketoacidosis is a potentially life-threatening complication especially in elderly subjects.

Clinical, radiological and therapeutic particularities in elderly men with lung cancer

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Abstract

Introduction: Lung cancer is a public health problem. Despite the evolution of diagnostic and therapeutic means, few data are available in the geriatric population.

Objective: study the clinical, diagnostic and therapeutic features of lung cancer in the elderly.

Methods: Retrospective study of 120 male patients over 65 years of age with lung cancer between January 2011 and January 2023. These patients were divided into two groups:G1= 45 Males ≥ 65 years and G2 =75 Males <65 years.

Results: The mean age of patients in G1 was 71± 5years vs 56± 6years for G2 . Eighty percent of G1 were smokers vs 74 .6% of G2. Hypertension (p=0.005) and diabetes (p=0.008) were more frequent in G1. Asthenia (p=0.001) and neurological symptoms (p=0.004) were more frequently reported in G1. Time to consultation were comparable between the two groups (p=0.02). Radiological presentation as pneumonia was more frequent in older men (p=0.02). Chemotherapy was more frequently indicated in men under 65 years of age (p=0.006). Analgesic radiotherapy (p=0.035), analgesics (p=0.03) and systemic corticoids (p=0.026) were more prescribed in G1. Overall survival for G1 was 36 months vs 26 months p=0.03.

Conclusion: The fragility of the elderly with lung cancer requires a more thorough geriatric evaluation for better management.

Oxygen therapy in critical ill elderly patients and outcomes

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Abstract

Introduction : Oxygen therapy in critical ill patients seems to be one of the most common interventions in critically ill elderly patients.

Objective: Determine the relationship between admission SpO2 levels at admission to intensive care unit (ICU), oxygen therapy and mortality.

Methods : An observational, descriptive and prospective, single centre study in the ED from 2022 until March 2023. We included patients aged more or equal than 65 years old and admitted to the ICU at the ED. Spo2 was calculated for all patients at admission. The oxygen intervention was described. The Cox regression model was constructed.

Results : Two hundred and eighteen patients were enrolled with a median age of 74 [65-98] years old and a sex ratio of 1.31. The mean SPO2 at admission without oxygen therapy was 89 ± 18 % For the oxygen therapy 102 (49%) : 20 patients (9%) were intubated, 17 (8%) were treated by Continous positive airway pressure 9 (4%) and 73 (35%) patients were treated with an oxygen mask. The intra-hospital mortality was shown in 74 patients (34%). The SPO2 at admission and the oxygen therapy was associated with mortality with respectively : (p=O,O28, OR = 1,02, IC 95% [1,02-1,05]) and (p=O,O4, OR = 2,1, IC 95% [1,03-4,53]).

Conclusion : The relationship between blood oxygenation and clinical outcomes among critically ill elderly patients is opposite.

Sepsis and septic shock in the emergency department : The prognostic value of geriatric-qsofa in the elderly patients

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Service des urgences Monji Slim La Marsa

Abstract

Introduction : The Glasgow coma scale may be not useful for older patients with pre-existing cognitive disorders in predicting mortality. A new score : the geriatric qsofa (g-qsofa) was used in this case.

Methods : A prospective and observational, single centre study in the ED from 2022 untill March 2023. We included patients aged more or equal to 65 years old with sepsis and septic shock. The qsofa and the g-qsofa based on arterial bloold pressure, respiratory rate and the presence of delirium was calculated for all patients at admission. The primary outcome was the intra-hospital mortality. The receiver-operating characteristic curve was used.

Results : One hundred and ten older patients were enrolled with a medium age of $75 \pm 0,7$ years old [65-94] and a sex ratio of 1.07. The intra-hospital mortality was shown in 38 % of patients. High qsofa and high g-qsofa were significantly correlated with in hospital mortality with a superiority of qsofa than geriatric qsofa, with respectively ($p<0,001$, AUC = 0,729, IC 95% [0,626-0,832] and ($p<0,001$, AUC= 0,697[0,592-0,802].

Conclusion : Qsofa seems to be a more suitable predictive tool than g-qsofa to predict mortality, even in the older patients with cognitive disorders.

What are the specificities of hospital lower respiratory tract infections among elderly?

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Abstract

Introduction: The geriatric concept of fragility predisposes elderly to an important risk of infection. Lower respiratory tract infections (LRTI) are the main cause of hospitalizations among elderly.The objective was to describe the epidemiological, clinical and therapeutic particularities of LRTI among elderly.

Methods: This was an observational cross-sectional study that included all subjects aged ≥60 hospitalized for nosocomial and community LRTI, in the two University Hospitals of Sfax in February 2019.

Results: In total, 28 hospitalizations were noted among, giving a prevalence of 8.7%. Of these, 3 infections were nosocomial (10.7%). The sex ratio was 1.8 and the median age was 71.5 years (Inter Quartile Range =[65.2-79.7]). The main associated co-morbidities were diabetes in 8 cases (29.6%), high blood pressure in 7 cases (25.9%), and immune suppression in 4 cases (14.3%). Clinically, 26 patients were symptomatic (96.3%) and the most frequent reported sign was fever (13;(52%)). Chest X-rays were used among 24 subjects (88.9%) and the most frequent radiologic finding was pulmonary infiltrate (21 cases; 87.5%). Infections were documented in 3 cases (10.7%), among which 2 were bacteria (7.1%) were multi-drug-resistant.Antibiotics were prescribed to 26 patients (92.9%). Molecules frequently used were third-generation cephalosporin (12 cases; (46.2%)), quinolones (11 cases;(29.3%)) and imipenem (5 cases; (19.2%)).

Conclusion: LRTI were still considered a main cause of hospital morbidity and antibiotic consumption among elderly. Prevention and rational use of antibiotics are pre-requisite to ameliorate their prognosis.

Impact of therapeutic education in the management of high blood pressure among elderly

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Abstract

Introduction : Therapeutic education (TE) has an important place in high blood pressure (HBP) monitoring. It aims to help patients acquire and maintain necessary skills to manage their disease. Elderly are the most age category affected by HBP and should be the most educated. The objective of this study was to determine the impact of TE on the control of HBP among elderly.

Methods : It was a quasi-experimental study, carried out in 48 ES (≥60 years) followed with HBP at the external consultation of the CHU HEDI CHAKER cardiology department in Sfax for 4 months. Patients were divided into 2 groups: One benefited from a TE program and the other one did not. The TE session was carried out in the form of an explanatory PowerPoint projection addressing 3 themes: HBP symptoms, normal values and complications, therapeutic compliance and self-measurement.

Results: Regarding, HBP control the mean systolic blood pressure was statistically lower in educated patients (136.7 ± 9.9VS142.4 ± 13;$p<0.001$). Similarly, the body mass index of educated ES decreased significantly (25.4 ± 2.5VS25.7 ± 2.7;$p=0.005$). Daily salt consumption has significantly decreased among educated people (60.9%VS24%;$p=0.01$). Knowledge about HBP symptoms were statistically better among educated patients (76.9%VS9.1%;$p=0.001$). Knowledge of hypertension complications was statistically better among educated elderly (92.3%VS45.5%;$p=0.023$).

Conclusions: TE had a great contribution in the management of HBP, notably by decreasing blood pressure values, improving knowledge about the disease as well as sanitizing dietetic habits.

Sleep quality in elderly subjects with respiratory diseases

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Abstract

Introduction: Sleep patterns change as age progresses and sleep problems faced by the elderly have gained recognition recently, especially for those who suffer from respiratory diseases, since sleep disturbances can affect the disease severity and control. Objective: To assess Sleep Quality (SQ) in elderly patients with respiratory diseases.

Patients and methods: It was a cross-sectional study, including 54 subjects aged > 60 years. All patients underwent spirometry with measurement of Forced Expiratory Volume in one second (FEV1) and Forced Vital Capacity (FVC) and answered a questionnaire evaluating SQ: Insomnia Severity Index (ISI).

Results: Mean age (years) was 67.11±4.56 and mean BMI (kg/m2) was 29.07±6.90. Most frequent lung diseases were: asthma (32.7%), COPD (16.3%), lung cancer (14.3%) and Interstitial Lung Disease (ILD) (10.2%). Dyspnea was present in 84.3% of patients and was evaluated according to mMRC scale as follows: mMRC1 (27.5%), mMRC2 (23.5%), mMRC3 (13.7%) and mMRC4 (19.6%). Fifty two percent of subjects were males. Means of spirometric data were 74.51±24.70 for FEV1%, 81.44±23.70 for FVC% and 71.27±13.56 for FEV1/FVC ratio. Mean value of ISI was 8.02±10.4. Insomnia severity was graded as follows: 60% with no insomnia, 30% with mild insomnia and 10% with moderate insomnia, there were no cases with severe insomnia. Insomnia was mostly found in patients with COPD (57%), asthma (50%), ILD (40%) and lung cancer (33%).

Conclusion: As a part of the aging process, SQ can be importantly affected in elderly subjects. So, management of insomnia is essential to improve overall health mainly in patients with respiratory diseases.

The place of spirometry in predicting lung aging in Tunisian smokers without airflow limitation

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Abstract

Introduction: Spirometry can demonstrate ventilatory impairment among smokers. But in the absence of spirometric abnormalities, can this test predict lung aging in smokers?

Objective: To investigate which spirometric data better predict lung aging among smokers.

Patients and methods: It was a retrospective study, conducted on 666 smokers in the pulmonary function tests department of Abderrahma Mami hospital Ariana. All smokers underwent spirometry with measurement of Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), Peak Expiratory Flow (PEF) and Forced Expiratory Flow 25-75% (FEF 25-75%).

Estimated Lung Age (ELA) was calculated according to this formula (QUANJER et al):
(1.483 * height) - (34.483*FEV1) -85.8621.
An aged lung was defined when ELA is > to chronological age.

Results: Mean age (years) was 52.54 ± 8.64 And mean LA (years) was 73.89 ± 16.86. These spirometric parameters were correlated with lung age: FEV1% (p<10-3, r= -0.86), FVC% (p<10-3, r= -0.803), PEF (P<10-3,r= -0.521), FEF 25% (p<10-3, r= -0.367), FEF 50% (p<10-3, r= -0.614) and FEF 75% (p<10-3, r= -0.567). From the total sample 211 subjects (31.86%) had an aged lung. ROC analysis was conducted to determine which parameters better predicted an aged lung and showed that FEV1% (Area Under the Curve [AUC]=0.995, CI: 0.99-1, p<10-3) and FVC% (AUC =0.935, CI: 0.917-0.953, p<10-3) were the best parameters to predict lung aging.

Conclusion: Spirometry can predict lung aging among smokers with normal FEV1/FVC ratio.

Could ceftriaxone induce pancreatitis in the elderly?

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Abstract

Introduction: The most reported medicines implicated in drug induced pancreatitis are anti-HIV agents and atypical antipsychotics. Ceftriaxone, although rare, has also been implicated.

Objective: We report a case of an elderly patient with ceftriaxone-induced acute pancreatitis.

Case report:
A 65-year-old man presented with fever, dysuria, and asthenia for several days. His history was significant for hypertension and prostate cancer for which he was operated on. His home medications consisted of irbesartan and amlodipine once daily. His bacteriological examination of urine showed leukocyturia at 150.000 elements and a negative culture. Antibiotic therapy was started, consisting of ceftriaxone 1g intraveinous daily. On the 8th day of treatment, the patient reported sudden onset of dyspepsia, nausea, epigastric pain, and fever. He had a significant increase in transaminases, an elevated lipase levels at 432IU/L and amylase at 235IU/L. Abdominal CT-scan showed multiple pre-bladder collections and acute pancreatitis (stageA of Balthazar score). The patient was treated conservatively with intraveinous fluids. Ceftriaxone was switched by imipenem. Within 72 hours, serum lipase levels and liver function improved significantly, with resolution of his symptoms. Pharmacovigilance investigation concluded in a ceftriaxone-induced acute biliary pancreatitis and contraindicated the further use of this molecule.

Conclusion: Physicians should be aware of the probability of ceftriaxone-induced acute pancreatitis. Although management of this adverse effect is variable, cessation of the drug is the only treatment necessary in most cases.

Hydrotherapy improves pain, function, and quality of life in elderly with reverse total shoulder arthroplasty

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Abstract

Introduction: Reverse total shoulder arthroplasty (RTSA) is known to be an effective surgical procedure for massive irreparable rotator cuff tears. Rapid functional recovery with no remaining pain is the objective of rehabilitation specially in this elderly population.

Objective: To compare the efficacy of hydrotherapy versus land exercise treatment in elderly with RTSA.

Methods: Patients received a first rehabilitative phase immediately after operation (one month). In the second phase (one month), one group continued the supervised program (n=5) and another received a supervised physiotherapy program in a swimming pool associated with self-rehabilitation (n=4). Pain (VAS), shoulder range of motion (goniometer), functional capacity (Constant) and quality of life (QOL) (SF-12) were assessed (baseline, and after 24 sessions).

Results: Patients mean age was 70 years. After the second phase of rehabilitation, higher clinical improvements were observed in the pool group. Physical and specifically mental QOL better improved in this group than in the other one.

Conclusion: Although time-consuming and needing a trained physiotherapist, hydrotherapy represents a good alternative in RTSA patients allowing pain threshold increase and muscle relaxation, thus practicing mobilizations that would not be possible to achieve outside the water. Unfortunately, private centers offering this technique are scarce and there are no public ones all over the country.

Etude Orthopedic Treatment: Is it Suitable for Displaced Olecranon Fractures in the Elderly?

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Abstract

Introduction: The treatment of olecranon fractures in the elderly has been scarcely studied previously. There was no prospective study that evaluated it.

Surgical treatment is recognized as a reference treatment; besides it is associated with numerous complications, particularly in elderly patients. Orthopedic treatment has the advantage of not generating these complications and seems to be an interesting alternative to stable olecranon fractures in the elderly. The orthopedic treatment was supposed to give good functional results in patients over 75 years.

Material and methods: We carried out an observational, prospective and monocentric study analyzing the functional result of the orthopedic treatment of isolated and closed fractures of the olecranon in patients over 75 years old. The primary endpoint was an assessment of functional recovery by Mayo Elbow Performance Score and Quick-Dash score at 6 months.

Results: Overall, twenty fractures among 19 patients have been included since January 2018. The average MEPS score at 6 months was 96.7. The Quick-Dash was 0.76. All but one of the patients had olecranon pseudarthrosis. There was no elbow instability.

Discussion: The orthopedic treatment of Mayo 1 and 2 olecranon fractures on a stable elbow in patients aged 75 or over showed excellent functional results 6 months after the trauma without associated complications.

Etude Bimalleolar Fractures in the Elderly: Treatment and Results from a Series of 43 Cases

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Abstract

Introduction: Bimalleolar fractures appear especially in elderly patients providing consequently specific complications and a major impact on autonomy. The aim of this study was to evaluate these determinants in an operated geriatric population.

Material and methods: Forty-three patients who were operated on in [2020-2022] were included retrospectively. The minimum age was 60 and 70 for women and men respectively. Functional (including autonomy and comorbidities) and radiographic assessment were performed before surgery and during the follow-up as well.

Results: The median age was 74 years. Mean preoperative autonomy scale was 7.8 points on the Parker score. Synthesis by screwed fibular plate, associated if necessary with internal malleolar synthesis, was performed in 40% of the cases. A satisfactory result was defined by a decrease in the Parker score of a maximum of 2 points. It was found among 89.9% of patients. Moreover, 71.8% of patients had no loss of autonomy. The main risk factors for loss of autonomy were age over than 80 years, inadequate surgical reduction quality, association of 2 or more comorbidities and Weber C fractures.

Discussion: The functional results following conventional surgery by internal malleolar and fibular synthesis for ankle fracture in the elderly were generally acceptable. Some factors could strongly influence patients' functional recovery.

Covid 19 fatality rate according to gender (Monastir, Tunisia)

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Abstract

Introduction: The high mortality rate of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) infection is a critical concern. Strikingly, men account for the majority of COVID-19 deaths, with current figures ranging from 59% to 75% of total mortality. However, despite clear implications in relation to COVID-19 mortality, most research has not considered sex as a critical factor in data analysis. The aim of this study is to determine fatality rate according to sex.

Methods: We conducted a longitudinal study from 01 April to 30th September. COVID 19 positive population presenting severe symptoms admitted to Fattouma Bourguiba University Hospital, Monastir were included in the study. Kaplan-Meier estimator and log-rank tests were performed to analyise the overall survival rates according to sex. Statistical analysis of fatality rate was performed using SPSS software 21.

Results: 1155 people were hospitalized during our study. Among them 57.2% males (n= 661), with sex ratio 1.33. 397 deaths were distributed as 224 males (56.4%), 173 females (43.6%). Kaplan-Meier analysis showed no significant difference in survival rates according to gender (p=0.609) with a survival median of 14 days.

Discussion/Conclusion: This survey shows that males were at higher risk of death. Providing the absence of a gender discrimination regarding hospitalization.

Clinical characteristics, management and outcomes of acute coronary syndrome in elderly

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Service des urgences Monji Slim La Marsa

Abstract

Introduction : The acute coronary syndrome (ACS) is commonly frequent in the emergency departement (ED).

Objective: We aimed to study the patient's characteristics, management, and clinical outcomes in the setting of acute coronary syndromes ACS with non ST segment elevation in elderly.

Methods : It was an observational, descriptive and prospective, single centre study in the ED from 2022 until March 2023. We included patients aged more or equal than 65 years old and admitted to the ED for ACS with non ST segment elevation. The clinical characteristics and outcomes were studied.

Results : One hundred and seventeen patients were enrolled with a medium age of 72 years old [65-93] and a sex ratio of 1.17. The medical history was : Diabetes in 69 (59%), hypertension in 84 (72%) dyslipidemia in 25 (21%), smoking in 41 (35%) and coronary heart disease in 55 patients (47%). The Grace score was 157 [94-238]. The medium troponine level was 1777 [4,5-40000]. Fifty two patients (55%) patients were treated by an invasive strategy. The acute heart failure was shown in 19 (16%). The intra-hospital mortality was shown in 7 patients (7%).

Conclusion : The knowledge of characteristics, management and outcomes of ACS with non ST segment elevation in elderly with a large medical history of cardiovascular risks may improve the prognosis.

Mortality from neurological diseases in the elderly

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Abstract

Background : The population ageing is accelerating considerably over time and Tunisia is no exception to this global phenomenon. In fact, the Tunisian population aged 65 years and over has increased by half between 2013 and 2021. This trend is contributing to an increasing burden of many diseases such as neurological diseases.

The aim of this study is to assess mortality among elderly population, related to neurological diseases.

Method: Data source was the national Information System of Causes of Death (ISCD) 2020 from medical death certificates for elderly subjects (65 years or older).

We used ICD-10 for the coding of causes of death and the underlying cause of death was identified using IRIS software. Coverage rate of ISCD for 2020 was 61% based on the National Information System of mortality (National Statistical Institute) Quality of ISCD data index (ANACONDA) was medium.

CSPRO was used for data entry and analysis.

Results: The total number of deaths registered in Tunisia in 2020 was 75,365 of which 69.7% (n=52500) were elderly, among them 53% (n=27783) were covered by the ISCD.

Diseases of the nervous system represent 2.8% (n=766) of the total causes of death among elderly. The proportional mortality was higher among elderly women: 3.3% vs. 2.3% for men.

Conclusion: Taking into consideration the ISCD performance indicators, these results incite to take prevention and management of these diseases and, above all, for the development of a more effective health care system to ensure primary and secondary prevention and to improve the quality of life of affected patients as a result of the disability it causes.

Infection in the elderly: experience of an infectious diseases unit

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Abstract

Introduction: The geriatric population is more prone to infections. Symptoms are atypical in.this population.

Objective: to study the main characteristics of infections in elderly patients.

Methods: A retrospective cross sectional study in the Unit of Infectious Diseases of the University Hospital of Mahdia, including all patients aged more than 65 years, hospitalized to manage an infection between January 2021 and March 2023. Data collection was carried out using patients' records.

Results: Fifty patients.were included with a mean-age of 73.76+/-6.3 years. The sex ratio was 1.5. The majority of patients were hypertensive (80%), 60% were diabetic, 34% had a history of a prior infection. In this population, 22% of patients were smokers, 4% were alcoholics, and 4% had scarifications.

The majority of patients presented with fever (68%). The other reported symptoms were urinary signs (34%), oedema (32%), back-pain (26%), asthenia (12%), rash (18%), digestive-signs (10%)and confusion (4%). Self-medication was reported in 12% of cases and 38% of patients consulted several times. The final diagnosis were urinary-tract infection (48%), non-necrotizing dermohypodermatitis(36%), meningoencephalitis (4%), meningitis (2%) and colitis (2%).

The infections were microbiologically documented in 18% of the cases, with a multidrug-resistant bacteria (MRB) isolated in 14% of the cases. A complication occurred during 22% of the hospitalizations.

Conclusion: Our study showed that fever was absent in 32% of the infected elderly-patients. Despite the few cases of documented infections, the rate of MRB is concerning.

Antibiotic prescription in the elderly in a unit of infectious diseases

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Abstract

Introduction: Infections are common among the elderly. Hospitalization may be needed to start an empirical antibiotic treatment and to indicate an adaptation.

Objective: To describe initial antibiotic prescriptions in elderly patients and the main causes of antibiotic modification. Methods: A retrospective cross-sectional study in the Unit of Infectious Diseases, included all patients aged more than 65 years, hospitalized to manage an infection between January 2020 and March 2023. Data collection was carried out using patients' records.

Results: Sixty-six patients were included with a mean age of 74.2+/-6.5 years. The sex ratio was 1.46. The microbiological documentation was possible in 34.8% of the infections, consisting of multidrug-resistant bacteria in 10.6% of cases.

An association of antibiotics was prescribed in 30.3% of cases. The main antibiotics used as first-line-treatment were cephalosporins (59.1%), aminoglycosides/cephalosporins (7.8%), carbapenems (7.6%), and glycopeptides (7.6%).

During the hospital stay, the antibiotic treatment was modified in 43.9% of cases for different reasons: switch to a narrower spectrum after the antibiogram in 27.5%, broadening of the spectrum in 20.6% of cases, change of the molecule due to an adverse effect in 10.3%, another associated infection in 6.8% and lack of the antibiotic initially prescribed in 13.7% of cases.

Conclusion: This showed that an association of antibiotics was prescribed in a third of the cases. A modification of the prescription was indicated in almost half of the cases.

Hyperhomocysteinemia in the elderly: positive and etiologic diagnosis

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Abstract

Introduction : Hyperhomocysteine (HH) is a biological pathology that could depend on the status of vitamins, which is often disturbed in the elderly.

Aim : The aim of this study was to identify the circumstances of discovery and etiologies involved in HH in the elderly. Material and methods : Retrospective descriptive study of patients aged more than 65 years old, with homocysteinemia over 15µmol/l between 2004 and 2021 in an internal medicine department.

Results : The study collated 25 patients with a sex ratio =1.8. The mean age was 74 years [65-92]. The mean homocysteinemia was 44.3µmol/l [18.7-131]. Patients had a history of hypertension (n=10), diabetes (n=7), and thrombosis (n=5). Venous thrombosis revealed the HH in 18 cases: Thrombosis of the lower limb (n=12), pulmonary embolism (n=4), abdominal vein thrombosis (n=3), and superficial thrombosis (n=2). The other HH manifestations were digestive (n=2), neurological (n=1), and anemic syndrome (n=12).

Etiological investigations revealed Vitamin B12 deficiency in 9 patients and Vitamin B9 deficiency in 8 patients. Cancer was associated in one case. The diagnosis remained undetermined in the rest of the patients. The evolution was favorable under vitamin supplementation in the majority of cases. Persistent HH was noted in one patient.

Conclusion : Venous thrombosis is the main circumstance for the discovery of HH. Vitamin deficiencies remain the predominant etiology. Treatment was based on vitamin supplementation.

Pulmonary embolism in the elderly

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Abstract

Introduction : Pulmonary embolism (PE) is a medical emergency with an increased incidence with increased age. There is a small number of data interestingly, on that pathology in the elderly.

Aim : The aim was to describe PE in the elderly and to find significant particularities.

Methods : It was a retrospective and descriptive study of patients aged more than 65 years old and treated for PE in an internal medicine department between 2009 and 2021.

Results : The study collected 43 patients (44% of all PE). The median age was 77 years old [65-95] with a sex-ratio=0.8. Risk factors and past thrombosis was present respectively in 51% and 14% of cases. Deep thrombosis was associated in 98% of cases. Biologic exams showed anemia (58%), inflammatory syndrome (37%), and renal deficiency (16%). The PE etiology was a tumour in 35% of cases. They were solid tumors (26%) and hemopathies (9%). Hyperhomocysteinemia was detected in 29%. We also noted a case of systemic lupus erythematosus, vasculitis, and amylose. Unknown etiology was the case in 28%. The comparative study showed most of the deep thrombosis, anemia, and tumor in the elderly without significant difference. All patients were treated with anticoagulants.

Conclusion : PE is frequent in the elderly but has a difficult diagnosis because of comorbidities. A prospective study could be interesting to describe the evolution and hemorrhagic risk.

COVID-19 transmission among elderly in Tunisia, 2022-2023

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Abstract

Background: The COVID-19 pandemic has significantly impacted global health, especially the elderly population who are at higher risk for severe disease outcomes. The aim of this study was to describe the dynamics of SARS-Cov-2 transmission in this sub-population in Tunisia in order to protect them from severe illness.

Method: We analyzed the data on tested cases among elderly ($\geq$ 65 years) during the period of 2022 (week 40) 2023 (week 14), notified to the national SARS-Cov-2 surveillance system at National Observatory of New and Emerging Diseases.We described tested cases by place, person and time.We calculated transmission indicators: testing rate, incidence rate and positivity rate.

Results: The total number of tested cases for COVID-19 among elderly was 6624 (15%of cases). The mean age was 74 years ± 8 years. The sex-ratio (M :F) was 1.3. In terms of vaccination status, 32 % of the elderly population was vaccinated against COVID-19 (at least one dose). Rapid Antigen test was the most used type of SARS-Cov-2 testing (54%). The SARS-Cov-2 positivity rate was 11%. The testing rate was 585.8/100,000 inhabitants and the incidence rate was 64.7/100,000 inhabitants. The governorates with the highest COVID-19 incidence rate (per 100,000 inhabitants) were Tunis 184.5; Ariana153.6 and Monastir147.4. The governorates with lowest incidence rate (per 100,000 inhabitants) were Kairouan 3.4; Mahdia 7.0 and Siliana 7.3. The peak number of tested cases and positive cases were respectively in week 41/2022 (385) and in week 11/2023 (61).

Conclusion: Our findings highlighted an ongoing SARS-Cov-2 transmission among the elderly in Tunisia.We recommend to enhance the efforts and to raise awareness among physicians in term of early detection, management and preventive measures among this vulnerable population : vaccine uptake and booster dose, in addition to the non pharmaceutic public health measures which prevent other respiratory viruses.

Study of Management of True Garden I Cervical Fractures in the Elderly: Is Functional Treatment a Valid Solution?

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Abstract

Introduction: The classic treatment for true Garden I cervical fractures in the elderly is osteosynthesis. However, high rates of reoperations have been described and the results of arthroplasties performed after failed osteosynthesis were less good than those of first-line arthroplasties. The aim of our work was to evaluate the results of functional treatment.

Patients and methods: All patients ≥65 years old admitted for a true Garden I cervical fracture between January 2019 and May 2022 were included. There were 32 patients with an average age of 82 years. In case of displacement, arthroplasty was performed. Parker and Harris scores were used for functional assessment.

Results: The displacement rate was observed in 31.25% of cases after a follow-up mean time of ten days. The average Parker score was 6.9 and the Harris score 82. Among the factors studied (age, gender, side, orientation of the fracture, degree of valgization, sagittal displacement, general condition), none was statistically predictive of displacement.
Conclusion: The medical complications' rate was only about 7% in our study, which seemed to be lower than the reported data for orthopedic treatment.

This study demonstrated that functional treatment led to fewer decubitus complications than orthopedic approach. However, the surgical revision rate was comparable to osteosynthesis.

The prediction value of Glasgow coma scale-pupils score in critically ill elderly patients

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Abstract

Introduction : Glasgow coma scale (GCS) associated with pupil response (GCS-P) is a new score used in patients with traumatic brain injury to predict mortality.

Objective : Determine the predictive value of the admission Glasgow coma scale (GCS-P) in critical ill elderly patients at the emergency department (ED).

Methods: It was an observational, descriptive and prospective, single centre study in the ED from 2022 untill March 2023. We included patients aged more or equal to 65 years old and admitted to the critical care unit at the ED. GCS-P at admission was calculated for individuals based on the model developed by Brennan et al. Area under the receiver operating characteristic curves (AUCs), were used to assess external validity of GCS-P to predict mortality in critical elderly patients patients and to compare predictive performance with GCS

Results: Two hundred and eighteen patients were enrolled with a median age of 74 [65-98] years old and a sex ratio of 1.31. The intra-hospital mortality was shown in 74 patients (34%). GCS-P showed a good discrimination with (AUC = 0,684, p<0,001, IC 95%[0,603-0,764] for in-hospital mortality. Predictive performances of GCS was similar to GCS-P with AUC= 0,684, p<0,001, IC 95% [0,604-0,765].

Conclusions: GCP-P improved predictive performance for short-term mortality as well as GCS in critically ill elderly patients.

Sepsis and Septic Shock in the Elderly:
The Prognostic Value of the Reverse Shock Index

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Abstract

Introduction: Sepsis and septic shock are two medical emergencies that can be life-threatening. The reverse shock index (rSI), defined as the ratio of systolic blood pressure to heart rate, has been recognized in the literature as a predictive parameter for mortality.

Objective: Determine the prognostic value of an rSI<1 in elderly patients admitted to the emergency department (ED) for sepsis or septic shock.

Materials and Methods: A prospective study was conducted at the ED over a period of 15 months, including all patients aged 65 years and older admitted for sepsis or septic shock. The main outcome measure was in-hospital mortality.

Results: The incidence of sepsis in the elderly population was 110 cases. The median age was 75 years and the sex ratio was 1.08. Upon admission, 68.2% of patients presented with sepsis and 31.8% presented with septic shock. The main sources of infection were urinary tract infections (37.4%) and respiratory tract infections (34.6%). The in-hospital mortality rate was 38%. The mean rSI calculated upon admission was 1.20 ±0.45. The rSI was less than 1 in 33.6% of patients. These patients had a 6.38 times higher risk of in-hospital mortality compared to patients with an rSI≥1 (95% CI [2.550-15.935]; p=0.000).

Conclusion: The rSI is a predictive factor for mortality in sepsis among the elderly population.

Clinical characteristics and outcomes of tuberculosis in the elderly

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Abstract

Background-Objectives: Tuberculosis remains a global health concern. The purpose of this study was to evaluate the differences in clinical characteristics and outcomes between older and younger patients with tuberculosis (TB).

Methods: We conducted a retrospective study (2010 – 2020) including COVID-19 patients hospitalized in the infectious diseases department between March 2020 and December 2021.The population was divided into G1 (patients aged < 65 years old) and G2 (aged 65 years or over). The clinical, biological and radiological characteristics, and outcomes were compared between the two groups.

Results: Overall, 141 patients were enrolled and divided into G1 (125 patients, 88.7%) and G2 (16 patients, 11.3%). There was no significant difference in terms of gender (p=0.17). The comorbidities were more frequent in G2 (29% vs 56.3%, p=0.028). Ganglionar tuberculosis is significantly increased in G1 (58.1% vs 31.3%, p=0.042). Osteo-articular tuberculosis is more frequent in G2 (21.8% vs 50%, p=0.014). Slow isoniazid acetylors were predominant in both groups (75% vs 70%, p=0.73). In general, adverse drug reaction rates were similar in older and younger patients (p=0.43). However, hyperuricemia (p=0.034) and digestive disorders (p=0.020) were significantly more increased in elderly patients (G2). Unfavourable outcomes and fatality rate were similar in both groups.

Conclusion: Adverse drug reaction rates and treatment outcomes were similar in older and younger patients with tuberculosis.

Bacteriological Profile and Antimicrobial Susceptibility Patterns of blood culture isolates in elderly patients

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Abstract

Introduction: Bloodstream infection (BSI) in elderly patients has a high mortality rate and the multidrug-resistant (MDR) organisms are becoming more common.

Objective: Evaluate the spectrum of microorganisms causing bacterial BSIs in the elderly population and their antimicrobial resistance patterns.

Methods: A cross-sectional study was carried out at the microbiology laboratory of the university hospital Taher Sfar Mahdia (January2021-December 2022) including bacterial strains isolated from blood cultures of hospitalized patients aged above 65 years.

Results: A total of 102 bacterial strains isolated from blood culture samples were included in the study. The median age was 69.8 years (65 – 85 years) with a sex-ratio M/F of 1.55. The pathogens were 71.6% Gram-negative bacilli (GNB) and 28.4% Gram-positive cocci. The most commonly isolated organisms were Klebsiella pneumoniae (24.5%), followed by coagulase-negative staphylococcus (17.6%) and Serratia marcescens (12.7%). The prevalence of MDR organisms was 45.1%. The overall prevalence of ESBL producers among 52 enterobacteriaceae isolates was found to be 17.3%. Nine strains of Enterobacteriaceae (17.3%) were resistant to carbapenems. Non-fermenting GNB were resistant to ceftazidime, imipenem, ciprofloxacin and amikacine in 33.3%, 45%, 42.9% and 33.3% of cases respectively. Staphylococci were resistant to methicillin in 13.7% of cases.

Conclusion: Regular surveillance of isolate sensitivity patterns and appropriate treatment of BSIs based on the current data will improve the prognosis and promote rational antibiotic use.

Aseptic osteonecrosis of the femoral head
(Case report)

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Abstract

Introduction: Osteonecrosis of the femoral head is a disabling condition, especially in its advanced stages. It is often under-diagnosed and frequently confused with degenerative disc disease.

Objective: Consider Osteonecrosis of the femoral head in front of symptoms of lumbosciatalgia.

Observation: We report the case of Mrs. NB 67 years old, cholecystectomized 07 years ago. She consults for left lumbosciatalgia and lameness evolving for 07 months of progressive aggravation, improved slightly under anti-inflammatories and analgesics. The magnetic resonance imaging (MRI) of the lumbar spine returned to normal with a fortuitous discovery of a left coxarthrosis which during advanced exploration was assessed to be osteonecrosis of the femoral head in its 4th stage.

Conclusion: Osteonecrosis of the femoral head complicated by coxarthrosis should not be ruled out in front of symptoms of lumbosciatalgia and lameness which can be mistaken for discopathy. An adequate clinical examination makes it possible to direct towards this discopathy and MRI of the hip will confirm and stage the necrosis.

Chest Pain revealing a Diaphragmatic Hernia (Case Report)

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Abstract

Introduction: Diaphragmatic hernia is a rare and severe condition, of congenital or traumatic origin. It results from the formation of a breach or a defect in the muscle of the diaphragm, by which the viscera of the abdominal cavity go up into the thoracic cavity and thus compressing the lungs.

Objective:
- Consider the severity of diaphragmatic hernia.
-Consider the usefulness of an early diagnosis of a diaphragmatic hernia

Observation: We report the case of Mr. M NB, 67 years old, type 2 diabetic and chronic bronchitic patient with poor observance, consulting for dyspnea at 87%, fever at 40 and cough with yellowish sputum for three days. A chest X-ray at its entrance showed the presence of the intestines at the thoracic level and it is through the existence of a left diaphragmatic hernia thus increasing the dyspnea and the severity of the respiratory symptoms. A surgical intervention was established to correct the diaphragmatic defect thus helping the recovery of the patient under antibiotics and NIV.

Conclusion: Diaphragmatic hernia can be asymptomatic as it can manifest itself during an aggravation of respiratory symptoms and discovered then in a fortuitous manner. The diagnosis is based on the demonstration of the outcome of the digestive organs in the thorax X-ray and by other radiological explorations. Surgical management will be necessary to improve the respiratory symptoms.

Frequency and associated factors of geriatric loneliness in Southern Tunisia

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Abstract

Introduction : Age-related loneliness is a social issue that continues to worsen and has significant psychological and physical consequences.

Objective: identify the frequency of loneliness in elderly from the southern region of Tunisia and the factors associated with it.

Methods : We conducted a cross-sectional study in Souk Lahad, Kebili, Tunisia, during the month of May 2022. Subjects over the age of 65 who consult at the basic health centres in Souk Lahad were interviewed by their treating doctor. The measurement tool was developed from a valid UCLA scale of loneliness translated into Arabic.

Results: A total of 50 elderlies were included in this study. The median age was 76 years (IIQ= [68-83]) with extremes ranging from 63 to 94 years; the majority were female. Most of the old people, who were recruited, were married and only 84% of them had more than two children. Overall, 76% of our sample had a moderately high level of loneliness. The average loneliness score was significantly higher in those who had a Covid 19 infection compared to those who did not catch the virus (54.07 ± 6.01; 50.91 ± 3.94; p=0.035). However, the UCLA score was not associated with the living status of the spouse nor with the gender of the participants (p>0.05).

Conclusion: Our study highlighted the effect of Covid infection on the mental health of elderlies. This impact must be detected especially in this vulnerable age group.

Elderly patients hospitalized for COVID-19 at a regional hospital in Tunisia: specificities of subjects aged over 75 years

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Abstract

Introduction: Elderly people are the most vulnerable population group to COVID-19. They are at greater risk of developing severe forms and of having a poor prognosis during the infection. The aim of this study was to compare the differences between young-old versus middle and old-old patients hospitalized at a regional hospital in Tunisia.

Methods: It was a prospective study which included elderly patients diagnosed with COVID-19 in a general medicine ward at the regional hospital of M'saken from January to August 2021. For the classification of elderly by age, we used the Anglo-Saxon geriatricians classification which defined "young-olds" between 65 and 74, "middle-olds" between 75 and 84 and "old-olds" over 85.

Results: Of the 86 elderly patients with COVID-19 confirmed, 45.3 % were young-old patients, and 54.7% were middle-old and old-old patients. 53.2% were men and 87.7% had at least one comorbidity among those over 75 years old, compared to 59% and 69.2% for the others. Hyperleukocytosis was identified in 16.2% of young old patients compared to 48.9% in over 75s (p=0.002), C-reactive protein (CRP) showed a mean of 71.92±37.21 in young old patients and 90.7±39.95 in over 75 (p=0.04). Troponin was higher in over 75 (48.5%) vs 18.5% (p=0.015). No significant differences were found according to complications (30.8 % vs 46.8%; p = 0.13) and lethality (7.7% versus 17%; p= 0.33).

Conclusion: Given the heterogeneous nature of elderly, the population aged over 75 were more likely to have a poor prognosis. Thus, careful nursing, observation, and systemic treatment is needed in their management.

The impact of falls and fear of falling on health-related quality of life in Tunisian elderly

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Abstract

Background and aims: Falls and fear of falling (FOF) are among the most common and serious health problems facing elderly persons. The present study aimed to evaluate the relationship between FOF and health-related quality of life (H-RQoL) in elderly fallers.

Methods: This was a cross-sectional study of thirty patients aged 65 years or older and known to have a history of falls in the previous 12 months. Falls Efficacy Scale (FES) and Short Form 36 (SF-36) were used to assess FOF and HR-QoL, respectively.

Results: The average age of fallers was 76.6±5.9 years [65 to 87] with a marked predominance of women (71.4%). The rate of falls in the previous 12 months was mean 2.1±0.9 [1 to 5] and occured during the day in 86.7% of cases. The time spent on the floor was 11.2±6.7 minutes [1 to 30]. The Functional Independence Measure' (FIM) was mean 112.5±11.5 [89 to 123].

Our results showed a high concern about fear of falling (FES >23) in 76.7% of elders. A majority (83.3%), perceived an impaired quality of life (SF-36 < 66.7%). On statistical analysis, FOF was significantly associated with a worse HR-QoL subscales (p<0.001) and functional independence (FIM) (p=002). Higher number of falling episodes (p=0.01) and longer time spent on the floor (p=0.004) were also related to lower SF-36 scores.

Conclusion : Fear of falling is identified as a major factor related to QOL in the elderly, leading to a restriction in activities and even a loss of autonomy.

Affective correlates of fear of falling in elderly persons

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Abstract

Background and aims: Falls occur frequently among older people and can lead to a range of adverse outcomes. We aimed to investigate anxiety and depressive disorders in elderly fallers and their relationship with fear of falling.

Methods: This was a cross-sectional study including patients aged 65 years or older, who had fallen at least once in the previous 12 months. Depression and anxiety severity were assessed with the 'hospital anxiety and depression Scale' (HAD-S). We used the 'Falls Efficacy Scale' (FES) to measure fear of falling among elderly.

Results: Thirty patients aged 76.6±5.9 years [65 to 87] were recuited for the study. The average of falling episodes in the previous year was 2.1±0.9 [1 to 5] and the delay spent on the floor was 11.2±6.7 minutes [1 to 30]. Only 26,6% of fallers reported fall-induced injuries and 16.7% sought medical attention. The prevalence of fear of fall was 76.7% among fallers (FES >23), especially in the falling injuries group (100%). Thirteen (43,3%) had a current depressive disorder and 36,7% were anxious (HAD-S >11). Both anxiety and depression were significatly associated with high concern about fear of falling (p<001). The longest delay in getting up after a fall was associated with higher depression score (p=0.03) and the number of falling episodes was associated with higher anxiety score (p=0.009).

Conclusion: Elderly individuals who experience falls suffer from high levels of anxiety, depression and fear of falling. Thus, careproviders should be alert to these disorders.

Urinary tract infections in the elderly

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Abstract

Introduction: Urinary tract infections (UTI) are common in gerontology with prolonged hospitalization and high mortality. The aim of this study was to describe the epidemiology, clinical presentation, laboratory findings and management of UTI in the elderly.

Methods: We conducted a 5-year retrospective study (2018 to 2022) including all the patients diagnosed with UTI with a positive urine culture in the Internal Medicine and Endocrinology Department at Taher Sfar Hospital in Mahdia.

Results: Ninety UTI occurred in 83 patients, mainly females (72.3%) with M/F ratio=0.38. The mean age was 75.55 ± 6.62 years. The patients had a history of diabetes in 55 cases (66.2%), chronic kidney failure (47%), renal lithiasis (19.3%), and high blood pressure (69 %). Fever was the most common symptom in 58 cases (64.4%) followed by urinary signs in 45 cases (50%). Enterobacteriaceae were the main pathogens isolated (94.8%); E. coli (66.7%) and K. pneumoniae (23.3%). The mean of C-reactive protein was 126.16 ± 89.66 mg/l and of white blood cells was 13347.24 ± 5528.28/mm3. The antimicrobial sensitivity rates were 16.7% for amoxicillin, 61.1% for ciprofloxacin and 66.7% for third-generation-cephalosporin. ESBL were isolated in 16.7% cases. The main complications were acute kidney failure (53.3%), septic shock (2.2%) and death (2,2%).

Conclusion: The management of UTIs in the elderly population presents a variety of challenges for the clinician. The reasonable use of antibiotics is necessary to limit the resistance extent.

Compliance with COVID-19 non-pharmaceutical interventions among elderly aged 65 and above. Tunisia, April 2021

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Abstract

Introduction: In Tunisia, protocols of non-pharmaceutical interventions targeting COVID-19 were implemented in order to reduce the spread of the disease. Effectiveness of these measures depends on compliance of individuals.

Objectives: This study aimed to assess compliance with COVID-19 non-pharmaceutical among elderly of 65 years old and above in Tunisia.

Methods: We used the data of the national household cross sectional seroprevalence survey that was conducted in Tunisia in April 2021 among adults aged ≥18 years using a random stratified two stage sampling. A sample size of 10,000 subjects was calculated (Openepi Software). Compliance with non-pharmaceutical measures was measured using Likert scale (never, rarely, occasionally, frequently). Estimations were adjusted to sample design and non-response rate.

Results: In total, 2,125 elderly participated in the study (1,675 households). Compliance of non-pharmaceutical interventions during lockdown period (April 2021) among them was as following:

In total, 842 (39.9%) reported having never attended markets ;427 (18.6%) rarely, 418 (20.7%) occasionally, and 438 (20.8%) frequently.

For attending restaurants ,1631(78.3%) responded never, 232(8.9%) rarely, 136(5.8%) occasionally, and 126(7.0%) frequently. For attending mosques, 1435 (69.2%) answered never, 226 (9.0%) rarely, 184 (8.9%) occasionally, and 280 (12.9%) frequently. For participating in family ceremonies (weddings, funerals) 939 (46.6.2%) answered never, 681 (29.7%) rarely, 418 (20.1%) occasionally, and 87 (3.6%) frequently.

For wearing face mask in public places, 523 (23.1%) answered never 315 (12.1%) rarely, 310 (12.4%) occasionally, and 977 (52.3%) frequently.

Conclusion: Adhering to these measures is essential to reduce the spread and impact of SARS-CoV-2. Caregivers and family members should ensure that the elderly understand and follow public health guidelines correctly.

Clinical measures of balance and functional assessment in elderly

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Abstract

Background and aims: Many factors may be associated with falls such as age related changes in postural stability, person's ability to control balance and impaired mobility. The present study aimed to investigate the relationship between clinical assessments of balance and functional independence in an elderly population.

Methods: This was a cross-sectional study including patients with history of falls aged 65 years or older. Balance performance and gait impairment were assessed using the ' Berg balance scale' (BBS) and the 'Timed Up and Go test' (TUG). We used the 'Functional Independence Measure' (FIM) to evaluate functional capacity.

Results: Thirty five patients aged 72.3±4.8 years [65 to 87] were recuited. They had fallen at least once during the previous 12 months. The BBS scores ranged from 22 to 50 of 56, with a mean of 34.4±11.5. The TUG was performed in 15.5±2.5 seconds [12 to 32]. High risk for falls (BBS ≤ 42) was noted in 63.3% of cases. Level of disability according to the FIM was mean 112.5±11.5 [89 to 123]. Our results demonstrated significant association between BBS and FIM scores (p<0.01). Patients with impaired balance performance were more dependent in performing activities of daily living (p=0.008). Additionally, a worse functional capacity increases the individual's risk of falling.

Conclusion: Our study had important implications for the development of rehabilitation programs that aim to improve balance performance, reduce risk of falls, maintain independence and enhance quality of life in older people.

Assessment of foot problems in elderly fallers

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Abstract

Background and aims: Foot problems are common in older people and may contribute to functional impairment and falls in this age group. This study aimed to examine foot deformities and to evaluate their effect on falling and balance in elderly people.

Methods : This was a cross-sectional study including patients with a history of falls aged 65 years or older. Clinical and podoscopic examinations were performed to study main foot deformities, footwear appropriateness and footprints. Walking and balance performances were assessed using the Timed Up and Go test (TUG) and the Berg balance scale (BBS) respectively.

Results : Thirty five patients (21 women, 14 men) aged 72.3±4.8 years [65 to 87] were recuited for the study. They had fallen at least once during the previous 12 months. Foot disorders were noted in 82.8% of cases. The most common were hyperkeratosis and calluses (77.1%), hallux valgus (36.7%), and lesser digital deformities (22.8%). Regarding footprints, pes planus presented in 45.7% of cases. The majority of patients (68.5%), wore inappropriate commercial shoes and 28.5% reported foot pain. Foot deformities were significantly associated with balance performance (p=0.02), but not with falls. Subjects with foot pain had worse BBS and TUG scores (p<0.01). Moreover, inappropriate footwear was significantly associated with risk of falls (p=0.01).

Conclusion : An aging foot may affect ambulatory function and increase the risk of fall. Further research is required to clarify whether specific foot conditions affect balance ability in older people and whether therapeutic interventions by foot-care specialists may decrease the risk of falls.

Characteristics of elder mistreatment perpetrators in Tunisian community-dwelling elders

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Abstract

Introduction The WHO has declared that elder abuse is a violation of human being's fundamental rights which is to be safe and free of violence. While research is illuminating characteristics of elderly that are associated with mistreatment, far less research has investigated characteristics of the perpetrator that are involved in elder mistreatment cases.

Aim: Study the characteristics of elder mistreatment perpetrators in a population of community-dwelling elders.

Methods: A cross-sectional study included 80 subjects aged 65years and older, living in the community. Elderly were asked about their age, gender, financial difficulties and mental health problems. Indicators of Abuse Screen (IOA) was used in this study to evaluate elder abuse.

Results: Findings show that 13.8% of the participants suffered from elder mistreatment in the last 12 months, with a mean IOA's score of 8.35 ± 6.01. According to subtypes, 10% reported psychological, 2.5% physical and 1.3% financial abuse.Abuse was recurrent and the victim's reactions were passive in all cases.

Perpetrators were a partner in 63.6%, a child in 18.2%, a sibling in 9.1% and a stepdaughter in 9.1% of cases. They were men in 72.7% of cases and their mean-age was 64.09 ± 18.19 years. Financial difficulties and psychological problems were reported in 54.5%and 36.4% of perpetrators, respectively. Perpetrators were most likely living with the victims (p=0.009). Partners were the perpetrators of half of the psychological abuse, and the totality of the physical and financial abuse. Abusive marital relationships were significantly associated with the perpetrator (P=0.04).

Conclusion: Our findings suggest that the cause of elder abuse is rarely unique and that this phenomenon is consequent to many pre-existing underlying problems affecting both elderly and perpetrators.

A comparative-study of elder mistreatment between community-dwelling elders and those residing in long-term care facilities

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Abstract

Introduction : Elderly who live in settings other than their own homes or those of relatives have received attention from researchers in Tunisia.

Aims : To compare sociodemographic and clinical factors associated with elder abuse between community-dwelling elders and those residing in a nursing home.

Methods : A comparative study was conducted, including 50 subjects aged 65 years and older living in the community and 20 age-and sex-matched subjects living in a nursing home. Cognitive status, depressive symptoms and autonomy were assessed using Mini-Mental State Examination,Geriatric Depression Scale and Activities of Daily Living scale. Elder abuse was evaluated with Indicators of Abuse Screen.

Results: Elder abuse was more prevalent in elderly residing in a nursing home (p=0.009) with a prevalence of 35% and 8% and a mean IOA score of 12.75 and 7.74. Psychological, physical, financial abuse and neglect were reported by elderly residing in nursing home. Those living in community reported exclusively psychological abuse. The victim's reactions were passive in all cases. Elders living in nursing home were more single or divorced (0.000) and financially independent (0.003). They had lower scores of MMSE (0.002) and ADL (0.014), and higher scores of GDS (0.022). A binary logistic regression confirmed that elder abuse was significantly more prevalent in nursing home after eliminating these confounding variables: age, gender, MMSE, GDS and ADL scores (p=0.018).

Conclusion: Our results confirm that elderly who live in long-term care facilities are at particular risk of abuse and psychological distress.

Diagnostic and Therapeutic Challenge in elderly depression

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Abstract

Introduction: Depression in elderly patients is widespread, commonly undiagnosed and usually untreated. Depressive disorder in late life should be treated with antidepressants adapted to this specific population.

Aim: We aim is to describe diagnosis, treatment and evolution in an elderly population.

Methods: It is an observational descriptive study conducted at outpatient and emergency departments at Razi hospital over a six-month period (From January to June 2022). Diagnosis of depression was based on DSM5 criteria.

Results: Forty patients were included. The most common diagnosis was characterized depressive episodes (n=20), followed by adjustment disorder with depressed mood (n=7), pseudo-dementia depression (n=6), masked depression in the elderly (n=3), depressive episode with psychotic features (n=2), anxiety-depressive disorder (n=1) and hostile depression (n=1).

The majority of patients were treated by Selective serotonin reuptake inhibitor (75%): sertraline (n=11), escitalopram (n=9), fluoxetine (n=6), and paroxetine (n=4).

Other treatments were employed: benzodiazepines (n=12), hydroxyzine (n=7) and olanzapine (n=2). There were no side effects noted, nor drug interactions.

Remission was noted in sixteen patients: partial remission (n=12) and complete remission (n=2). Four patients had no remission, and one patient had a complication (dementia). Almost half of the patients were lost from sight.

Conclusion: Antidepressant medications have become the foundation for the treatment of moderate to severe depression in older adults. This study encourages the use of methods to follow-up patients, in order to judge the effectiveness of the treatment.

Sleep quality in elderly patients with COPD

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Abstract

Introduction: Sleep disturbances are frequent in patients with chronic obstructive pulmonary disease (COPD). Information about sleep disturbances in elderly patients with COPD is lacking.

Aim: Investigate the association between sleep quality disturbances and disease severity in an elderly COPD population.

Methods: It was a cross-sectional study conducted in Department 1 of Pneumology from January 2022 to June 2022.

We enrolled patients whose age was ≥65 years and treated for a confirmed COPD. Sleep quality was evaluated by the Pittsburgh Sleep Quality Index (PSQI). Poor sleep quality is defined by a score ≥5.

Results: Sixty-nine patients were enrolled. The mean age of the patients was 71 years and ranged from 65 to 97 years. Thirty-five of the cases belonged to group Gold D. Chronic respiratory failure was reported in 30 cases and 15 had long-term oxygen therapy.

We counted 51 patients with comorbidities at admission.

A median PSQI score was 7. We noted that 68% of the population had poor sleep quality.

As the stage of dyspnea increased, the rate of poor sleep quality increased significantly (p=0.028).

A CAT score≥ 10 was associated with poor sleep quality (p<0.001).

Poor sleep quality was significantly associated with GOLD 4 (p=0.039).

Conclusion: Our findings suggest a strong link between sleep impairment in elderly COPD subjects and the disease severity. We should select these patients to remedy this problem and improve their life quality.

Quality of life in elderly diabetic subjects in the district of Moknine and Mahdia

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Abstract

Introduction: Diabetes constitutes a major health problem in the world and in Tunisia by its frequency and the gravity of its complications.

Objective: To evaluate the factors influencing the quality of life of elderly patients with diabetes.

Materials and methods: Cross-sectional study of the quality of life in 96 elderly diabetic patients, followed at the district of Moknine and Mahdia from September 2022 to March 2023, using a self-questionnaire inspired by the ADDQOL questionnaire.

Results: Population with an average age of 70 [66,76] years and a sex ratio of 0.35. The average glycated hemoglobin was 9.05±2.11. The average time to diabetes progression was 14.4±7.88 years. Degenerative complications were noted in 79%.

The average quality of life score was -8.8IC95 [-10.06 - -7.75]. Univariate analysis showed a significant association between deterioration in quality of life and diabetes imbalance (p=0.005), the existence of degenerative complications (p=0.018), and hospitalization for diabetes decompensation in the previous year (p=0.041). According to the multivariate analysis, degenerative complications were a risk factor with OR=8.47, CI95% [1.067-67.21], p=0.043.

Conclusion: We recommend early detection and treatment of diabetes-related complications. Special attention should be given to elderly diabetic subjects in order to prolong a better quality of life.

Factors influencing quality of life in elderly hypertensive subjects

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Abstract

Introduction: Arterial hypertension constitutes a major public health problem in the world and in Tunisia by its frequency and the gravity of its complications.

Objective : To assess the factors influencing the quality of life of hypertensive elderly patients.

Materials and methods: Cross-sectional study of the quality of life in 84 elderly hypertensive patients, followed at the district of Moknine and Mahdia from September 2022 to March 2023, using a self-questionnaire inspired by the ADDQOL questionnaire.

Results: Population with a mean age of 73.51±7.2 years and a sex ratio of 0.3. The mean time to progression of hypertension was 15.5±8.7 years. The mean quality of life score was -9.9±5.4. The univariate analysis showed a significant association between deterioration in quality of life and unbalanced hypertension (P=0.028), the existence of degenerative complications (P=0.000), obesity (P=0.03), seniority beyond 10 years (P=0.003), low intellectual level (p=0.038). On multivariate analysis, obesity and blood pressure imbalance were risk factors with (OR=4.8, CI95% [1.22-18.83], P=0.024) and (OR=3.8 CI95% [1.1-13.6], P=0.035) respectively.

Conclusion : This study showed many risk factors influencing the quality of life of hypertensive patients. These results would be useful for health policies to establish additional directions for the management of the elderly.

Malignant otitis externa among elderly patients: an experience of a 13-year period

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Abstract

Introduction: Malignant otitis externa (MOE) is a fatal infection. It tends to affect the elderly patients. We aimed to identify the epidemiological, clinical, therapeutic, and evolutionary features of MOE for elderly patients.

Materials and Methods: A retrospective study including elderly patients (more than 65 years old) hospitalized in the infectious diseases department of la Rabta for MOE between 2010 and 2022.

Results: We encountered 18 patients, among whom 11 were male (61,1%). The mean age was 74.9 ±5 years. Seventeen patients had diabetes mellitus (94, 4%). The clinical symptoms were otalgia (n=16), otorrhea (n=12), peripheral facial nerve palsy (n=7), cepulase-negative staphylococci (n=1) Staphylococcus aureus (n=1) and Proteus mirabilis (n=1). Fungal species were isolated in 9 cases, represented mainly by Aspergillus flavus (n=5) followed by Candida parapsilosis (n=2), Candida albicans (n=2). Computed tomography scan of the temporal bone showed stenosis of the external auditory canal (n=16), bone erosion (n=12), cerebral venous thrombosis (n=7) and mastoiditis (n=4). The first-line antimicrobial used was a combination of ciprofloxacin and ceftazidime (22,2%). In total, 8 patients received voriconazole (44,4%) and 3 patients received fluconazole (16,7%). The disease evolution was favorable in 11 cases. Sequelae were noted in 7 cases.

Conclusion: MOE remains a severe disease occurring mainly among elderly patients. A team approach must be carried while taking care of these patients in order to improve the outcome.

Depression in Late Life: study of 40 cases

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Abstract

Introduction : Depression is the most frequent cause of emotional suffering in later life and significantly decreases quality of life. Depression in the elderly can be associated with somatic comorbidity.

Aim: Study epidemiological character of the elderly and reason for consultation of patients presenting with depressive disorders.

Methods: It is a retrospective, descriptive study conducted at outpatient and emergency departments at Razi hospital over a six-month period (from January to June 2022).

Results: Forty patients were included. The average age of patients was 70 ± 5.8 years with a sex ratio of 0.53. Six patients had no significant disease history. Half of the patients had arterial hypertension, followed by diabetes (n=12), stroke (n=6), coronary artery disease (n=4), dysthyroid disease (n=3), rhythm disorders (n=2) and dementia (n=2).

The highest reason for consulting was depressive disorder in 16 patients (40%). Other patients consulted for memory complaint (n=8), somatic complaint (n=8), anxiety symptomatology (n=4) and sleep disorder (n=3). The examination revealed psychotic character in six patients. The majority of patients (70%) didn't have any associated cognitive disorder.

Conclusion: Depression is frequently associated with somatic comorbidities in the elderly and can increase their severity. Further research is needed to elucidate the relationship between these two issues.

Patients with chronic heart failure and their quality of life: What about elderly patients?

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Abstract

Introduction: Chronic heart failure (CHF) is a common condition especially in the elderly, characterized by high morbidity and mortality rates as well as an important impact on quality of life. We aimed to compare characteristics of CHF as well as quality of life between elderly and non-elderly-patients.

Methods: It was a cross-sectional-study conducted in Sfax, Southern-Tunisia, between January and June 2022, among CHF-patients (G1:age< 60years, G2:age ≥60 years). Diagnosis of CHF was confirmed by a left ventricular ejection fraction ≤40%. The Minnesota-living-with-heart-failure-Questionnaire (MLHFQ) was used to evaluate quality of life. A MLHFQ>45 designed poor quality-of-life among CHF-patients.

Results: A total of 50 patients were included in the survey. There were 22 patients aged ≥60 years old (44%). There were 17 males in G2 (77.3%) and 23 males in G1 (82.1%). The main symptom of CHF was dyspnea noted in 18 cases from G1(64.3%) and 15 cases from G2 (68.2%) followed by chest pain in G1 (4; 14.3%) and by asthenia in G2 (4; 18.2%). When comparing elderly patients with others, they had significantly higher prevalence of hypertension (54.5%,14.3%; p=0.003), higher prevalence of renal-failure (13.6%, 3.6%;p=0.048), higher prevalence of atrial fibrillation (58.8%, 35.3%; p=0.039) but lower prevalence of palpitation (26.3%; 39.3%; p=0.047) and of tobacco use (13.6%, 39.3%; p=0.04). There was no significant difference in poor quality of life between elderly-patients and others (36.3%,42.9%;p=0.6).

Conclusion: Particular attention should be paid to elderly patients with CHF, as they represent different ground in order to enhance their quality of life.

Epidemiological, clinical features and chronological trends of cutaneous leishmaniasis among elderly patients in Southern Tunisia

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Abstract

Introduction: Specific health characteristics have lead to an increase in susceptibility to many infections among elderly including cutaneous leishmaniasis (CL). This study aimed to describe the epidemiological and clinical characteristics of CL and its chronological trends in elderly patients in Southern-Tunisia.

Methods: This was a prospective study including all elderly patients aged ≥60 years with newly diagnosed CL during the 2017–2021period at the District Hospital el-Hamma, Gabes, Southern-Tunisia.

Results: Overall, 114 new elderly CL cases were diagnosed during the study period with an average of 22.8 new cases/year. The mean annual CL incidence rate (IR) for elderly was 2.75/100.000 population/year. The sex-ratio(M/F) ratio was 0.5. The median age was 70 years, interquartile range (IQR)=[67-76years]. Reported cases were mainly diagnosed during the autumn-winter season (n= 89;78%). Multiple lesions were noted for 17 cases (15.2%). The CL lesions were predominately located in the lower limbs (66 cases,58.9%), in the upper limbs (47 cases,42%) and the face (13 cases,11.4%). The IR of CL in elderly patients decreased significantly from 3.6/100 000 population in 2017 to 0.6/100 000 population in 2021(rho=-0,85;p=0.048).

Conclusion: The decrease in the annual IR of CL in elderly patients in Southern-Tunisia would arise from the effectiveness of the national CL control program strategies concerning this age group. However, a longer-term evaluation is needed to confirm this trend.

Inflammatory biomarkers in COPD : Comparison between elderly and young patients

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Abstract

Introduction : The acute exacerbation of chronic obstructive pulmonary desease (COPD) is common at the emergency departement (ED).

Objective: Determine the impact of inflammatory biomarkers in the use of bi-level positive airway pressure (BiPAP) between young and elderly patients admitted to the ED with COPD.

Methods: It was an observational, descriptive and prospective, single centre study in the ED from 2022 untill March 2023. We included patients admitted to the ED with an acute exacerbation of COPD. Leukocytes, platelets and CRP were measured for all patients at admission. The major endpoint was the use of BiPAP at admission.

Results: Ninety six patients were enrolled with a median age of 66 [36-98] years old and a sex ratio of 1,74. Forty one patients (42%) were young and 55 were elderly (57%). The Use of bi-level positive airway pressure (BiPAP) was used in 67 (73%). The biomarkers, Leukocytes, platelets and CRP were not respectively associated with the use of BiPAP in the elderly with (p=0,89; p=0,57;P=0,45) while CRP was associated with mortality in young patients with p=0,012, OR=76, IC95%[52-367].

Conclusion : No biomarkers seem to be associated with mortality in elderly patients while CRP seems to be a simple measure to predict the use of BiPAP in young patients.

Bilateral orbital cellulitis confounds to anaphylaxis and leading to septic shock: A case report

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Abstract

Introduction: Orbital cellulitis affects the soft tissues of the orbit. With various causes it can be associated with severe complications such as cavernous sinus thrombosis, septic shock, and death. Prompt diagnosis and treatment are essential.

Objective: The importance of diagnostic and therapeutic management of orbital cellulitis in elderly diabetic patients

Observation: A 70-year-old female presented to our emergency department with bilateral eyelid swelling that had been progressing for two days. She had a history of diabetes treated with insulin. It was initially taken for anaphylaxis and treated with corticosteroids.

Upon admission, the patient was conscious with signs of respiratory distress SpO2 90% on ambient air, respiratory rate of 24 breaths per minute. Her blood pressure was 18/10 mmHg and heart rate was 100 beats per minute. Temperature was 39°C and fingerstick-glucose 5g. On ophthalmological examination, there was significant bilateral eyelid edema, erythematous and shiny without a rim. Fundoscopy was difficult to perform.

The laboratory tests showed a clear inflammatory and infectious syndrome, blood gas analysis disclosed diabetic ketoacidosis, hypoxia and a high lactate level.

The chest X-ray was normal, and the CT angiography revealed a bilateral pre-septal CHANDLER II orbital cellulitis. The microbiological study allowed the isolation of Methicillin-resistant Staphylococcus aureus (MRSA).

A triple anti-staphylococcal antibiotic and heparin therapy were initiated urgently; however, the evolution was fatal within a week.

Conclusion: Severe skin infection of the orbit should raise suspicion of orbital cellulitis. This justifies effective anticoagulation combined with appropriate antibiotic therapy, the only guarantee of prevention of functional and vital risks.

Life-threatening myxedema coma with cardiogenic shock in an elderly patient: a case report

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Abstract

Introduction: Myxedema coma is often observed in elderly women and associated with high mortality. Fortunately, it has become rare with the improvement of healthcare systems and therapeutic education.

Objective: This case shows the need to check for thyroid dysfunction in the elderly with changes in mental state. Observation: A 72-year-old woman was admitted to emergency department due to unconsciousness in February 2023, with a long history of a hypothyroidism but no treatment since 3 months and diabetes treated with metformin. The family reported a progressive onset of lethargy and depression.

At admission she was comatose, Hypothermic 32°C, bradycardic 47 beats per minute (bpm) with low blood pressure (70/50 mmHg), Fingerstick glucose 1 g/l.

Laboratory studies disclosed an acute renal failure: serum creatinine 300umol/L, hyponatremia 127 mmol/L, a metabolic lactic acidosis: pH 7,25 and lactate 13mmol/l and rhabdomyolysis. There was no inflammatory syndrome, the hepatic assessment and analysis of the cerebrospinal fluid were normal ; also the electrocardiogram, chest radiography, and the cerebral tomography. Cardiac ultrasound showed global hypokinesia. A thyroid panel showed a depressed level of FT4 1pmol/l and a high level of TSH over 46mUI/L.

She benefited from conditioning, intubation and re-warming. She was given vasoactive drugs, 100mg bolus of hydrocortisone hemi-succinate intravenously, 200ug L-thyroxine via gastric tube and underwent hemodialysis.

Despite resuscitation, the patient's condition remained unstable resulting in her death the following day.

Conclusion: Severe depletion of triiodothyronine ultimately leads to organ dysfunction particularly with metformin poisoning. Patients with hypothyroidism should be periodically monitored for the adequacy of their treatment.

Pneumocystis pneumonia and pulmonary tuberculosis coinfection in an HIV-seronegative older patient

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Abstract

Background: Pneumocystis pneumonia (PCP) and pulmonary tuberculosis (TB) are common opportunistic infections in patients with HIV. Coinfection with Pneumocystis jirovecii (PJ) and Mycobacterium tuberculosis (MTB) is well described in people living with HIV, but rarely reported in HIV-seronegative patients.

Objective: We present a rare case of PCP-TB coinfection in an HIV-seronegative older patient.

Case report

A 71-year-old male was referred to our department for investigation of a lung cavity. He had been diagnosed with immune thrombocytopenic purpura and put on prednisolone for the past two months. He had no prior history of tuberculosis and denied symptoms of cough, fever, chills, night sweats, fatigue, or recent weight loss. Physical examination revealed no abnormalities. Sputum samples showed no acid-fast bacilli on Ziehl-Neelsen staining. Six days later, he developed dyspnea. Auscultation found bilateral crackles. Chest computed tomography scan, compared to the previous imaging, showed new bilateral ground-glass opacities with a crazy-paving pattern.

Nasopharyngeal SARS-CoV-2 polymerase chain reaction (PCR) was negative. Direct examination of bronchoalveolar lavage fluid was negative for MTB, PJ and other fungi. The diagnosis of PCP and TB coinfection was established through PCR for both infections, with a PJ PCR greater than 1000 copies/mL. HIV antibody test was negative. Antituberculosis drugs and trimethoprim-sulfamethoxazole were prescribed. The patient was asymptomatic at three-month follow-up.

Conclusion: PCP-TB coinfection may occur in HIV-seronegative patients on glucocorticoids. The diagnosis of concurrent TB and PCP should be considered in patients appropriately treated for either one of these infections, with unsatisfactory clinical outcome.

Clinical Features Of Zoster In The Elderly

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Abstract

Introduction : Zoster is a mild viral infection caused by the reactivation of the varicella zoster virus. It is common in the elderly and can lead to several complications.

Objective : Clarify the epidemiological, clinical and evolutionary characteristics of zoster in the elderly.

Methodology : A retrospective study conducted from January 2007 to March 2023. The medical files of patients aged 65 and over, who had zoster and who were followed up in the dermatology department of Habib Thameur hospital of Tunis were studied.

Results : Totally, 222 patients were included. The average age was 72.4 years [65-94 years]. The sex ratio M/F was 1.58. Comorbidities were dominated by arterial hypertension (44.1%) and diabetes (28.3%). Prodromes like fever, asthenia and pain were noticed in 70.7% of patients. The topography of the skin lesions was: cervical and thoracic (49.5%), ophthalmic (16.6%), lower limb (7.2%), flank (5.8%), upper limb (5.8%), lumbar region (4%), upper limb with hemithorax (4.9%), pelvis (1.8%) and ear (2.2%). The most frequent complications were: postherpetic pain (66,6%), skin complications such as ulceration, keloids and skin necrosis (26%), ocular complications such as keratitis, uveitis, blindness and eyelid lift paralysis (4,5%). Hospitalisation was recommended for 18.9% of patients who had a severe form of zoster. They were treated with acyclovir intravenously. The rest were treated with chlorehexidine, paracetamol and oral valacyclovir.

Conclusion : Zoster in the elderly remains a hot topic due to its frequency and high rate of complications. This should prompt zoster vaccination in the elderly.

Access block and prolonged length of stay for elderly patients in the emergency department

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Abstract

Introduction: Population ageing is projected to impact on health services utilization including emergency department (ED) with older patients (aged ≥ 65 years) reportedly having a prolonged length of stay (LOS) and a lower likelihood of admission in in-patient departments.

Aims: We aimed to investigate the factors associated with prolonged (LOS) (≥ 5 days) and access block among older patients and the outcomes of these patients in a tertiary hospital, identifying the potentially modifiable risk factors to provide effective management and to mitigate delays in emergency care.

Materials and Methods: We examined 65 ED patients' admission in the ED for more than five days over the course of 3 months in Farhat Hached ED. The data collected included age, sex, LOS, medical history, endpoint (discharge or death), diagnoses and proposed admission departments.

Results: From 65 patients who had a LOS ≥ 5 days and who didn't have access to in-patient beds 81.5% of them were aged patients. In the older patients group the median age was 75. The mortality rate was 28.30% in the older group and 8.3% in the younger group. 64.1% of the geriatric patients were critically ill.

Conclusion: Our findings revealed a novel global healthcare issue which is the inability of elderly patients to access in-patient beds from the EDs and suggest the need for policies to encourage more prompt admission of ED elderly patients to the different wards.

Mortality risk factors of hip fracture in elderly

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Abstract

Introduction : Hip fractures (HF) in elderly are a major public health problem with considerable socioeconomic and serious medical consequences that can cause death. Despite advances in implants, resuscitation technologies and postoperative care, mortality rate remains high.

We conducted this study to identify the mortality risk factors of HF in elderly.

Methods : We performed a descriptive retrospective study between January 2020 and July 2021 including 89 patients older than 65 years old with HF. Demographic features, clinical and radiographic data as well as therapeutic modalities and evolutive aspects were recorded. Patients with multiple trauma and those having HF caused by bone metastasis weren't included in the study.

Results : Median age was 80. More than half of our cohort had multiple chronic diseases (56%). Femoral neck and trochanteric fractures accounted for 33% and 67% respectively. The mortality rate was 36%, with 19% at 3 months and 25% at 6 months. All patients who didn't undergo surgery had died. The mortality risk factors were age (p=0.022), kidney failure (p=0.01), multiple chronic conditions (p=0.033), anemia (p=0.024) and poor compliance of rehabilitation (p=0.005).

Conclusion : HF in the elderly is associated with a high mortality rate. This mortality is directly related to surgical abstention. Otherwise, the risk factors are mainly associated with the patient's background. Other than managing comorbidities, treatment includes a postoperative functional rehabilitation.

Functional prognosis after a hip fracture in elderly

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Abstract

Introduction : The incidence of hip fractures (HF), one of the most common traumatic injuries in the elderly, increases continuously due to the population ageing. Its treatment which is almost exclusively surgical aims to save the life of this population often weakened by the chronic comorbidities, and to regain autonomy.

We conducted our study to identify the factors of the functional prognosis after a HF in the elderly.

Methods : We performed a descriptive retrospective study between January 2020 and July 2021 including 89 patients with HF who were older than 65 years old. Demographic features, clinical and radiographic data as well as therapeutic modalities and evolutive aspects were recorded.

Results : Median age was 80. Half of our cohort (49%) were autonomous before the fracture with a mobility score of Parker of 9/9. Patients who preserved the same mobility score of Parker before and after surgery represented 54%. According to the Merle d'Aubigné and Postel score calculated in the surviving patients, 24 patients had a good functional result (PMA>13) and 33 patients had a poor functional result (PMA<=13). An initial score of Parker of 9/9 was statistically associated with a good functional prognosis (p=0.001).

Conclusion : HF causes a significant loss of autonomy in the elderly. Autonomy as well as functional result are more preserved when the patient was autonomous before the fracture.

External validation of the 4C Mortality Score in elderly patients

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Abstract

Introduction: The 4C mortality score is an accessible risk stratification score developed and validated on a large, diverse cohort within the UK and based on eight different parameters: age, sex, number of comorbidities, respiratory rate, peripheral oxygen saturation, GCS, urea or BUN level, and CRP.

Methods: This multicenter retrospective observational, cohort study of patients admitted to three Tunisian university hospitals. The study included medical records of elderly patients with confirmed COVID-19 infection who were hospitalized from July 2020 until December 2021. Incomplete data were excluded.

Results: We included 889 patients, 124 patients (13.9%) were transferred to ICU. In-hospital mortality rate was 26.3% (234 patients).

• Observed mortality by 4C score risk groups

Risk Group Overall (n=889) Dead (n=234)
Low (0-3), n (%) 0 0
Intermediate (4-8), n (%) 134, (16.1) 4, (1.7)
High (9-14), n (%) 593, (66.7) 120, (51.3)
Very high (>=15), n (%) 153, (17.2) 110, (47.0)

• Sensitivity and specificity of 4C score

The Area under (ROC) Curve for the 4C prognostic score is 0.81, CI (0.78-0.85) for in-hospital mortality.

Conclusion: Increasing age is a strong predictor of in-hospital mortality in our cohort of patients admitted with Covid-19 together with comorbidity.

The 4C model exhibited a high discriminative ability among patients with Covid-19 admitted with an (AUC=0.81; 95% CI: 0.78-0.85) for in-hospital mortality.

The spread of multidrug resistant bacteria in the elderly: an emerging crisis

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Abstract

Introduction Multidrug resistant organisms (MDROs) causing infections have been rising over the past few decades worldwide and are associated with significant morbidity and mortality especially in elderly. This study aimed to identify risk factors associated with the emergence of MDROs in the elderly.

Methods: This was a cross-sectional study conducted among the elderly ($\geq$60 years) in the two university hospitals of Sfax on February 2019. Multidrug resistance is an acquired non-susceptibility to at least one agent in three or more antimicrobial categories.

Results: Globally, 319 elderly patients were enrolled. There were 103 infected patients (32.3%). Samples were taken for microbiology diagnosis from infected patients in 30 cases (9.4%), among whom 29 microorganisms were isolated (96.6%). Of these, 10 MDROs (34.4%) were noted. MDROs were predominantly isolated from urine (n=7;70%). MDR-gram-negative were found in 6 cases (60%) of which the most frequently isolated microorganisms were Escherichia coli (33%) and pseudomonas aeruginosa (33%). Factors significantly associated with the emergence of MDROs in elderly included a length of hospital stay exceeding 6 days (OR=8.9;p=0.02), the use of central venous line (OR=10.7;p=0.029) and endotracheal tube (OR=15;p=0.017).

Conclusion: These findings provided an insight into the magnitude and the predictors of MDROs infections among the elderly and suggested that interventions reducing device use should be a priority to prevent MDRO spread.

Does tuberculosis threaten our ageing populations?

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Abstract

Introduction: The global population is ageing quickly and the geriatric population is vulnerable to infectious diseases especially tuberculosis infection (TB). This study aimed to analyse the prognosis factors and chronological trends of TB in the elderly in Sfax.

Methods: We conducted a retrospective study from January 1995 to December 2016 in Sfax including all new elderly TB cases (≥60 years).

Results: We notified 512 new elderly TB cases, with an average of 23.3 new cases/year. The mean TB incidence rate for elderly was 2.31/100,000 population/year. The case-fatality rate was 8.6%. TB was pulmonary(PTB) in 223 cases (43.6%) and extra-pulmonary(EPTB) in 289 cases (56.4%). Among EPTB sites, lymph node involvement was the most common in 99 cases (34.3%). Multivariate analysis showed that factors independently associated with unsuccessful outcome among elderly patients were age between 80 and 89 (AOR=4.5;p<0.001), male gender (AOR=2.2;p=0.026) and neuromeningeal involvement (AOR=4.6;p=0.011). The incidence of TB in elderly patients increased significantly from 0.95/100,000 population in 1995 to 2.17/100,000 population in 2016 (Rho=0.48;p=0.024).

Conclusion: The incidence of TB in the elderly has increased considerably in Sfax in the last two decades. A mass screening, an earlier diagnosis and a well conducted treatment will allow us to reduce the cases among the geriatric population.

Mortality statistics according to the global burden of diseases groups in Tunisian elderly

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Abstract

Background: The Global Burden of Disease (GBD) in elderly individuals is the impact that various health conditions have on health and well-being. Within this context, mortality statistics are important to estimate the GBD among the elderly in Tunisia.

Methods: Data from the national Information System on Causes of Death (ISCD) for 2020 were used. Paper-based death certificates were collected, and Causes of Death (CoD) were coded based on the International Classification of Diseases (ICD-10). Elderly death was defined as death of people ≥65 years. The three broad GBD-groups of health conditions, integrated in ANA-CONDA software, were as follows: (1) communicable diseases (infectious and parasitic diseases, maternal and neonatal causes and malnutrition), (2) non communicable diseases including mental health, and (3) external causes including accidents, homicides, suicide and natural disasters. The garbage codes refer to the use of vague, unspecific, or poorly defined codes to describe the underlying CoD. The share of garbage codes was estimated by the share of CoD coded as part of the chapter VIIIX of the ICD-10, referring to symptoms, signs and abnormal clinical and laboratory findings.

Results: Overall, 27,783 elderly-certified-deaths were collected in 2020, covering 53% of total registered-deaths. The median age was 81 years (interquartile range:73-87). The contributors to elderly deaths were: communicable diseases (8.2%, n=2283), non communicable and mental health diseases (67.1%, n=18642), and external causes of death (2.6%,n=726). The share of garbage codes was (22.1%, n=6132). Conclusions: Our study confirmed the important place of non communicable and mental health diseases in the overall GBD among elderly in Tunisia. Although assessing trends over years is important; the improvement of the ISCD coverage rate and death certification quality are crucial to provide better mortality-data.

Endocrine, metabolic, and nutritional causes of death in Tunisian Elderly in 2020: Results of the national information system on causes of deaths

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Abstract

Background: Due to a lower birth-rate and increased expectation of life, the proportion of elderly in Tunisian population is becoming higher. Endocrine, Metabolic, and Nutritional (EMN) diseases figure among leading causes of death worldwide. Through this study, we aimed to identify proportional mortality related to EMN diseases among the elderly group in Tunisia for 2020.

Methods: We used data from the national Information System on Causes of Death (ISCD) related to deaths in 2020. Death-certificates were collected in the National Institute of Health and Causes of Death (CoD) and were coded based on the International Classification of Diseases (ICD-10). The underlying cause of death was identified using IRIS software. As part of this study, we focused on elderly death, defined as death of people aged 65 years old and more. The total number of registered deaths by age-group was obtained from the National Institute of Statistics for 2020. CSPRO software was used for data entry and analysis.

Results: Overall, 75,365 deaths were registered in 2020, among which 69.7% (n=52500) were registered in the elderly. The ISCD's coverage-rate for this population was 53% (n=27783). The median age was 81years (interquartile range:73-87). EMN diseases ranked third among certified deaths in Tunisian elderly, after the circulatory system-diseases (27.2%) and cancers (13.1%), accounting for 10.1% of total deaths (n=2802). Almost a third of deaths (32.9%) were certified by the patient's referring physician and most deaths occurred at home (71.8%). Leading CoD among EMN diseases were as follow: diabetes complications (93.5%), severe malnutrition (2.9%), and hydro-electrolyte imbalance (0.9%).

Conclusion: Our findings stress the need to continue efforts to address EMN risk factors since adulthood to guarantee a better quality of life for elderly in Tunisia. Furthermore, a better management of chronic diseases including providing adequate treatment and psychological assistance are highly recommended.

Particularities of multiple myeloma discovered in the elderly

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Abstract

Introduction: Multiple myeloma (MM) is a clonal plasma cell proliferation with an increasing incidence due to the population aging

Aim: The aim was to describe the clinical and paraclinical profile of MM in the elderly.

Materials and methods: Retrospective descriptive study of patients hospitalized in internal medicine [2008-2023], older than 65 years, with MM diagnosed based on clinical and biological results.

Results: The study included 18 patients with a sex ratio of 1. The mean age was 73.8 years old [65-85].
The modes of onset were: altered general condition (n=11), bone pain (n=8), pathological fracture (n=2) and amyloidosis (n=1). Physical examination revealed anemic syndrome (n=6) and anemia (n=6) and tumoral syndrome (n=4). Biology showed anemia (n=15), accelerated ESR (n=9), hypercalcemia (n=9), renal failure (n=7) and proteinuria (n=7). PEE revealed peak monoclonal (n=14) or hypogammaglobulinemia (n=4). Imagery showed geodes or bone lysis in 8 cases. Dystrophic plasma cells (>10%) were present on the myelogram in all these cases. Symptomatic treatment was started and then the patients were transferred to a clinical hematology unit. The only significant difference was the absence of fever compared to younger subjects.

Conclusion: MM requires early diagnosis. Recent data suggest that elderly with good functional status may benefit from auto transplantation and new less toxic agents.

Predictors of mortality for Non ST segment elevation in elderly

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Abstract

Introduction : The non ST segment elevation (NSTEMI) is communly frequent in the emergency departement (ED). Predictors of mortality in elderly patients with NSTEMI was investigated.

Objective: Assess the predictors of mortality in NSTEMI in the elderly

Methods : It was an observational, descriptive and prospective, single centre study in the ED from 2022 until March 2023. We included patients aged more or equal to 65 years old and admitted to the ED for NSTEMI. Cox regression was used to estimate HRs for all-cause mortality associated with NSTEMI. The primary outcome was the intra-hospital mortality.

Results : One hundred and seventeen patients were enrolled with a medium age of 72 [65-93] years old and a sex ratio of 1.17. The medical history was : Diabetes in 69 (59%), hypertension in 84 (72%), smoking in 41 (35%), coronary heart disease in 55 patients (47%) and chronic kidney disease in 19 (16%) of patients. The Grace score was 157 [94-238]. The medium troponine level was 1777 [4,5-4000]. The intrahospital mortality was shown in 7 patients (7%). In the multivariable analysis : A history of chronic kidney failure (P=0,03, OR= 1,4, IC 95% [1,2-1,69] significantly increased the rate of in-hospital mortality.

Conclusion : A history of chronic kidney failure was a strong independent predictor of mortality in elderly patients with NSTEMI .

The prognostic value of troponine cutoff and mortality in elderly with Non ST segment elevation

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Abstract

Introduction : The diagnostic value and optimal cutoff level of cardiac ultrasensitive troponin (TnI) in patients with non ST segment elevation (NSTEMI) was studied.

Objective : Assessed the optimal cutoff value of troponin for predicting mortality for patients admitted to the emergency departement (ED) with NSTEMI.

Methods : It was an observational, descriptive and prospective, single centre study in the ED from 2022 untill March 2023. We included patients aged more or equal to 65 years old and admitted to the ED for NSTEMI. The TnI was measured for all patients at admission. The primary outcome was the mortality at 3 months.

Results : One hundred and seventeen patients were enrolled with a medium age of 72 [65-93] years old and a sex ratio of 1.17. The intra-hospital mortality was shown in 7 (7%). The mortality at 3 months after hospitalisation for NSTEMI was 17 (14%). The medium troponine level was 1,777 [4,5-4000]. The receiver-operating characteristic curve showed an area under the curve (AUC) of 0.810, p=0,000, IC 95% [0,688-0,931] for diagnosis of NSTEMI with a troponin I cutoff of >150 ng/L (sensitivity: 62,9%, specificity: 94%).

Conclusion : The optimal troponin I cutoff to effectively predict mortality in NSTEMI was >150 ng/L.

Effectiveness of Mirror therapy in the rehabilitation of the paretic upper limb in chronic stroke patients

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Abstract

Introduction: Mirror therapy (MT) was suggested as a simple treatment that may enhance the upper limb (UL) function in chronic stroke (CS) patients.

Objective to evaluate the effects of MT on UL-related functioning of patients with CS.

Methods: A total of 12 CS patients with no severe cognitive deficit and with mild to moderate motor impairment and spasticity were assigned to the experimental group or to the control group. Both groups received 12 sessions either of MT or of passive mobilization. Pain, range of motion, muscles strength, spasticity and UL function (WMFT and the Box and Block test) were assessed before, at the end of the intervention and at one month follow up.

Results: An improvement in all outcome measures in both groups was noticed ; more important in the experimental group than in the control group and continued at one month follow up except for spasticity. Some minor adverse effects (dizziness, nausea and sweating) were encountered at the beginning of the protocol and disappeared later.

Conclusion: Added to a conventional rehabilitation program, MT seems to be an effective non-invasive easy-to-apply and low-cost alternative that can improve UL motor functions after CS. It may even be integrated into the home environment for patients with sufficient cognitive abilities.

Balance and gait rehabilitation in elderly with and without Alzheimer's disease

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Abstract

Introduction: Gait and balance rehabilitation carried out in an elderly subject with Alzheimer's disease (AD), seems difficult or may be unfeasible due to memory and attention disorders.

Objective to verify to what extent a protocol of gait and balance rehabilitation is feasible and effective in AD patients compared to patients with no cognitive impairment.

Methods: Older adults with independent gait were classified into two groups: six healthy controls and six AD. A one-to-one rehabilitation program was achieved in all patients over three months.

Balance and gait were evaluated through functional tests (TUGT, 10m walking test, Berg scale, Functional Reach Test, NFAC).

The degree of difficulty of carrying out the rehabilitation sessions was assessed by the physiotherapist (0-100 scale).

Results: An improvement of gait and balance (slightly more impaired in AD at baseline) was obtained in all patients. No particular problem was seen during the rehabilitation sessions neither in AD nor in healthy controls. Dealing with both groups was considered at the same level of difficulty by the physiotherapist in charge.

Conclusion: Once indicated, balance and gait rehabilitation must be prescribed for elderly with AD in total respect of ethical values of equality and beneficence. A more specific quantification of balance and gait performance (posturography, gait analyses) may help identifying postural instability and fall risks.

Depression in elderly in south Tunisia.

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Abstract

Introduction : Depression is not a natural part of aging. Depression is often reversible with prompt recognition. However, if left untreated, depression may result in the onset of physical, cognitive, functional, and social impairment. Our research aimed to determine the prevalence of depression and its contributing factors among elderlies in south Tunisia.

Methods : A cross-sectional study was conducted in March 2022 among subjects aged over 65 years, sampled from outpatient consultations at basic health centres in Souk Lahad, Kebili, Tunisia. The measurement tool was developed from a validated version of the Geriatric Depression Scale of geriatric depression translated into Arabic.

Results: A total of 50 elderlies were included in this study. The median age was 76 years (IIQ= [68-83]) with extremes ranging from 63 to 94 years; the majority were female. Ninety per cent of them didn't go to high school. Most of the old people, who were recruited, were married and only 84% of them had more than two children. Overall, 96% of our sample had probable depression. There was no significant association between depression and family environment. However, the mean depression score was significantly higher among those with a deceased partner than those whose partner is still alive (60/100; 53/100; p=0.035).

Conclusion:: Depression is common in late life. For this reason, it is essential to identify these depressive states while attempting to lessen the causes that contribute to them through a multidisciplinary intervention.

Loss of autonomy among elderly patients

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Abstract

Introduction: Aging is accompanied by several psychological and physiological changes and loss of autonomy in some cases. Loss of autonomy is a complex concept that can have several causes.

Objective: To identify the factors associated with the loss of autonomy in the elderly.

Methods: This is a descriptive and analytical study carried out over a period of four months from September 2022 to December 2022 in the offices of three free practice doctors in Monastir. The study population was consultants aged over 60 years. We used the KATZ Index of independence in activities of daily living to assess autonomy.

Results: Our sample (N=60) had a mean age of 68 years. The sex ratio was equal to 0.875. More than half of our sample had a loss of autonomy (56.7%). The loss of autonomy was significantly associated with age over 70, the history of hospitalization, the history of falls and the presence of two or more chronic pathologies (P<0.001, P<0.0001, P<0.001 and P=0.02, respectively).

Conclusion: Our work focused on factors associated with the loss of autonomy in the elderly, in particular somatic comorbidities. This paves the way for studies on prevention and treatment strategies, which go far beyond the restricted framework of the prescription of drugs and additional examinations.

Factors associated with COVID-19 severity in older adults in the district hospital of Teboulba

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Abstract

Introduction: SARS-CoV-2 is a cause of a respiratory distress syndrome that affects all age groups. However, the elderly are more at risk of presenting severe clinical forms.

Objective: To determine the factors associated with COVID-19 severity in elderly.

Methods: Descriptive retrospective study including patients aged 65 and over with confirmed SARS-CoV2 infection admitted to the COVID unit of Teboulba district hospital during the period from November 2021 to February 2022.

Results: We included 50 patients, with a mean age of 74.3 ±6.8 years and a sex ratio of 1.38. Among our patients, 40% had severe forms. We found a significant association between COVID-19 severity and history of dyslipidemia, gout and neoplasia, polypathology ($p=0.02$ each) and polypharmacy (0.029). The clinical sign associated with severity was mental confusion ($p= 0.021$). Elevated troponins, D-dimers, LDH and presence of hyponatremia were significantly associated with severe COVID-19 ($p=0.006$, $p=0.001$, $p=0.000$ and $p=0.004$, respectively).

Conclusion: Polypathology and polypharmacy are factors that can increase the severity of the disease in older patients with COVID-19. Specific care taking into account geriatric particularities and knowledge of the predictors of severity of COVID-19 infection is essential.

Intra-abdominal abscess in elderly patients

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Abstract

Introduction: Intra-abdominal abscess (IAA) caused by pyogenic germs is a rare disease. It is potentially curable but easily overlooked, especially in elderly patients.

Aim: Describe the epidemio-clinical characteristics and evolution of IAA in elderly patients.

Methods: We report observations of IAA collected at the infectious diseases department La Rabta over an 8-year period (between 2015 and 2022).

Results: There were five elderly patients, mostly males. The median age was 75 years [66-84]. Medical history revealed diabetes (n=3), arterial hypertension (n=3), dyslipidaemia (n=4), stroke (n=2) and coronary artery disease (n=2). Surgical history disclosed cholecystectomy (n=1), nephrectomy (n=1), appendicectomy (n=1) and operated hydatid liver cyst. The average delay to diagnosis was 26 days [5-74]. The start mode of pain was mostly brutal (n=4). Patients presented with fever associated to urinary symptoms (n=3) and/or abdominal pain (n=3). Biological results showed hyperleukocytosis with predominantly PNN, elevated C reactive protein, and functional acute renal failure (n=3). Abdominal-pelvic scanner objectified multiloculated hypodense collections with multiple localizations: hepatic (n=3), splenic (n=1), renal (n=1) and prostatic (n=1). The implicated bacteria were Klebsiella pneumoniae isolated either from urine (n=1) or from deep pus sample (n=2). All patients received antibiotic treatments. Two patients benefited from percutaneous drainage, two patients were transferred to surgical ward, and one death was reported.

Conclusion: IAA is associated with high morbidity and mortality. The acuity of symptoms decreased in elderly patients explains such delay to diagnosis. Therefore, practitioners must have heightened indices of suspicion.

Trends of Covid-19 infection according to vaccination status and gender (Monastir, Tunisia)

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Abstract

Introduction: The pandemic of COVID-19, caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has caused an unprecedented global social and economic impact, and high numbers of deaths. Many risk factors have been identified in the progression of COVID-19 into a severe and critical stage, among them male gender (1). The aim of this study was to determine the variation of vaccination status among positive patients according to sex.

Methods: We conducted a cross sectional study from the 1 st April 2021 to the 20th September 2021(from week number 13 to week number 38). Population presenting symptoms visited the pre triage of the Emergency Department where they were registered for PCR test. The department of preventive medicine and epidemiology realized the PCRs. A questionnaire was used to determine the vaccination status. For each gender, we investigated the trend of vaccinated (V) and unvaccinated (NV) citizens and we calculated the ratio V/NV. Statistical analysis was performed using SPSS software 21.

Results: We included 1,762 infected people, among them 767 (43%) males and 995 (56%) females. Of all them, 106 men (36.6%), 184 women (63.4%) were vaccinated.

The global trend of infected cases regardless of gender was decreasing (r'M=0.47, r'F=-0.51,p<0.05). For male (M) and female (F) subjects, the number of NV is decreasing (b M=-0.59, bF=-0.69, p<0.05) whereas the number of V is increasing (b =0.29, b =0.4, p<0.05), and a ratio <1with a tendency for inversion in the last few weeks in both sex.

Discussion/ conclusion: The trend of infected cases regardless of gender was decreasing and the number of Vaccinated people is increasing through the weeks of the survey; this could be explained by the availability of vaccines and the national vaccination days. In conclusion, trends of Covid-19 infection among vaccinated and unvaccinated cases is not correlated to gender.

Does Azithromycin impact eicosanoids' concentrations in older patients with COVID-19?

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Abstract

Introduction: In COVID-19, inflammation is an important mechanism and a major cause of death. Azithromycin, one of WHO's watch antibiotics, has immune-modulatory effects. It inhibits the expression of Phospholipase A2, causing the downregulation of the pro-inflammatory eicosanoids.

Aim: We looked for a possible association between eicosanoids' concentrations in older patients with COVID-19 and Azithromycin intake.

Methods: We dosed Prostaglandin E2 (PGE2), Thromboxane B2 (TXB2), Leukotriene B4 (LTB4) and their precursor, arachidonic acid (AA) in older in-patients with COVID-19. Blood samples were collected during the first 48 hours of hospitalisation. Patients were separated into two groups: those who received Azithromycin for the same episode of COVID-19 prior to hospitalisation (AZM+), and those who did not (AZM-).

We did not prescribe Azithromycin to our in-patients.

Results: We included 68 in-patients: 32AZM+ and 36AZM-.

Sex-ratio was 1.83 (AZM+:1.91; AZM-:1.78; p=0.881).

Mean age was 74.5±7.4 yo (AZM+:73.2±6.7; AZM-:75.7±7.9; p=0.070).

Obesity was present in 22.1% of our patients (AZM+:18.8%; AZM-:25%; p=0.535), abdominal obesity was present in 79.4% of our patients (AZM+:78.1%; AZM-:80.6%; p=0.805).

Patients received the same corticosteroid protocol.

During their hospitalisation, 15 patients died (22,1%): four AZM+ (12.5%) and 11 AZM- (30.6%) (p=0.073).

There was no statistically significant difference in PGE2 (p=0.555), TXB2 (p=0.917), LTB4 (p=0.357) and AA (p=0.971) between AZM+ and AZM-
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Conclusion: Although Azithromycin is known for its immune-modulatory effects, its intake did not change the concentrations of pro-inflammatory eicosanoids, nor the patients' prognosis. Its use in viral infections should be minimized so it wouldn't lead to antibiotic resistance and side effects.

Characteristics of elderly hospitalized in an infectious disease department

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Abstract

Introduction: Infections are one of the main causes of morbidity in the geriatric population.

Aim: We studied the causes and impact of hospitalisation of older adults in an infectious disease department.

Methods: We led a retrospective study in our department from January 2022 to March 2023. We included hospitalisations of patients aged 65-year-old and beyond.

Results: We included 63 hospitalisations of older people (26.7% of all hospitalisations) involving 58 in-patients (Sex-ratio=1.52). Eight patients were 85-years-old and older.

Hypertension was the most frequent known chronic disease at admission (n=41;65%). The median Charlson comorbidity index was four (from 2 to 11).

The final diagnosis was an infectious disease in 58 cases (92%): urinary tract (n=24;41%), osteoarticular (n=12;21%) and cutaneous infection (n=11;19%) were the most common sites of infection. Ten patients had healthcare-associated infections. Microbiological documentation was obtained in 28 patients. Background treatment was changed in 12 patients (19%) and chronic medication started in 18 (29%). Eight patients required blood transfusion (13%) and seven, oxygen (11%). Chronic diseases were diagnosed in 20 patients (32%). Exacerbation of underlying disease occurred in 15 patients (24%) and pharmacotoxicity in 12 (19%).

Five patients died (7,9%), from septic shock (n=2), cardiogenic shock (n=2) and neurologic failure (n=1).

Conclusion: Many factors make older people at risk of severe infections. This needs to be taken into consideration when treating them.

Impact of the COVID-19 pandemic on seniors in a district hospital

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Abstract

Introduction: In Tunisia, more than 80% of deceased COVID19 cases were aged 60 or over. Studies on the geriatric population are lacking.

Objective: To determine the effects of COVID-19 among the elderly.

Methods: Descriptive retrospective study including patients aged 65 and over with confirmed SARS-CoV2 infection admitted to the COVID unit of Teboulba district hospital during the period from November 2021 to February 2022.

Results: A total of 50 patients were included, with a mean age of 74.3 ±6.8 years and a sex ratio of 1.38. The most frequent clinical signs were asthenia (86%) and fever (70%). The initial examination revealed oxygen saturation at IQR 90%. The most common biological abnormalities were CRP>100mg/l (56%) and high LDH (48%). All patients received corticosteroid therapy. In 96% of cases, antibiotic therapy was prescribed. The mean length of stay was 9.38±6.9 days. The evolution was favorable in 37 cases (74%). Dehydration, superinfection and acute renal failure were the main complications in 42%, 15% and 16% of cases, respectively. Nine patients (18%) were transferred to other departments. Three patients (6%) died.

Conclusion: Although COVID-19 infection has often a favorable evolution, it presents a high morbidity and mortality in the elderly.

Autonomy and frailty of older patients with COVID-19 in the district hospital of Teboulba

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Abstract

Introduction: The frail elderly patient risks losing his autonomy during an acute destabilization. The COVID-19 pandemic is a source of suffering for older people around the world.

Objective: To assess the degree of autonomy and frailty of older patients with COVID-19.

Methods: Descriptive retrospective study including patients aged 65 and over with confirmed SARS-CoV2 infection admitted to the COVID unit of Teboulba district hospital during the period from November 2021 to February 2022.

Results: Fifty patients were included, with a mean age of 74.3 ±6.8 years 6.8 and a sex ratio of 1.38. According to the AGGIR grid, 58% of patients were classified as GIR 6, 32% GIR 5 and 10% GIR 4. According to the SEGA grid, 68% of patients were not very frail, 28% frail and 4% very frail. The mean number of pathologies and drugs was 2.84 ± 2.26 and 3.36 ± 3.08, respectively. Polypathology and polypharmacy were present in 66% and 34% of patients. None of our patients had dementia. Among our patients, 40% had severe forms.

Conclusion: The use of an assessment of frailty, autonomy, and other geriatric syndromes, could help in the early warning of elderly at high risk of severe COVID-19 pneumonia.

Clinical features and outcomes of COVID-19 in older adults

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Urgence Mahdia

Abstract

Introduction: Older people are among the most vulnerable and affected groups by severe forms of COVID-19. The symptomatology is sometimes frustrating and aspecific in this population.

Objective: To determine the clinical features and outcomes of COVID-19 in elderly.

Methods: This is a retrospective study including older adults with confirmed infection with SARS-CoV-2 and hospitalized in the emergency department from August 1st 2020 to August 31st 2021.

Results: A total of 539 elderly were collected in our study with a mean age of 75.81±7.83 years and a sex ratio of 1.03. At least one comorbidity was noted in 82.4% of patients. They were dominated by hypertension (62.3%) and diabetes (50.6%). The main clinical signs were dyspnea, fever and cough in 79.2%, 57%, and 48.8% of cases, respectively. The clinical form was severe in 238 patients (44.2%), 52.9% presented with acute respiratory distress syndrome. All patients were hospitalized requiring oxygen therapy. Lung involvement CT exceeded 50% in 62.7% of patients. The median length of hospitalization was 10 days (4-16). The evolution was favorable for 157 patients. The complications observed during hospitalization were acute coronary syndrome (2.4%), left ventricular failure (1.9%) and pulmonary embolism (0.4%). Among the elderly patients, 255 died in the emergency department.

Conclusion: Elderly with COVID-19 are prone to poor outcomes. Rigorous preventive measures, timely diagnosis, and adequate treatment are critical to reduce acute respiratory distress syndrome and severe complications in the elderly.

COVID-19 mortality and its predictors in the elderly

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Abstract

Introduction: Whilst people of all ages are affected by COVID-19 virus, older people have higher rates of comorbidities and may experience more severe inflammatory responses, which puts them at a high mortality risk.

Objective: To determine the mortality in COVID-19 elderly patients and its predictors in this age group.
Methods: This is a retrospective study including older adults (age ≥ 65 years) with confirmed infection with SARS-CoV-2 and hospitalized in the emergency department from August 1st 2020 to August 31st 2021.

Results: During the study period, 539 patients were included in our work, of whom 255 died due to COVID-19 complications in the emergency department and 52 died after transfer to the intensive care unit or COVID-19 unit. Overall in-hospital mortality was 56.96%. The results of adapted logistic regression showed that the variables of severity of the lung involvement on the computed tomography (OR = 2.13, 95% CI:1.11-4.09, p = 0.023) and PaO2/FiO2 Ratio (OR = 0.986, 95% CI:0.977-0.996, p = 0.005) were the main predictors of COVID-19 related death in elderly patients.

Conclusion: The rate of COVID-19 related death in the hospitalized elderly patients is remarkable. This rate increased among patients with increased percentage of lung involvement, and decreased PaO2/FiO2 Ratio. Our findings may provide a predictive model, which needs validation in multicenter studies, and help health care professionals to identify high-risk groups, promote remedial measures, and control mortality among older people.

Incidence of renal failure in elderly patients with COVID-1 9 who died in the emergency department

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Abstract

Introduction: Since the first months of the pandemic, several studies have reported extremely severe kidney damage, which is associated with the occurrence of major complications, including respiratory failure, the need for invasive mechanical ventilation and death, apart from comorbidities and other risk factors.

Objective: To determine the incidence of renal failure in older patients with COVID-19 who died in the emergency department.

Methods: This is a retrospective study carried out in the emergency department from August 1st 2020 to August 31st 2021. Elderly patients tested positive with COVID and who developed acute renal failure (ARF) during hospitalization were included.

Results: During the study period, 539 patients were included in our work, of whom 255 died in the emergency department. The mean age of our patients was 77.67±8 years and 80% of the deaths were older than 70 years. The sex ratio was 1.008. The majority of our patients were hypertensive (64.7%) and diabetic (51%). Almost a third of the patients (29.4%, n=75) developed acute renal failure during hospitalization. Of these 75 patients with acute renal failure, 45 (60%) required emergency hemofiltration.

Conclusion: Acute renal failure is a frequent complication of severe SARS-COV pneumonia and is an indicator of disease severity.
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Characteristics of severe sepsis in the elderly

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Abstract

Introduction : The increased incidence of sepsis in the elderly is becoming a disturbing reality in our days, mainly with the aging of the general population, and the predisposition of old persons to chronic diseases and severe infections.

Objective : Describe the epidemiological profile, the characteristics, the treatment strategies and the prognosis of serious sepsis in the elderly population.

Methods : Descriptive retrospective study including elderly patients hospitalized in our medical department for the management of sepsis and septic shock between 2016 and 2022.

Results : Twenty elderly patients were included, with a mean age of 73 years old (±6,9). The majority of the patients were female (55%). Among the comorbidities, diabetes mellitus and arterial hypertension accounted for the largest proportion (70%).

The most common revealed signs were fever (90%) and alteration of general condition (75%).

Urinary tract (55%) and cutaneous infections (35%) were the mainly onset of severe sepsis.

The causative organisms were isolated in 9 cases. They were mainly Escherichia coli (55,5%) and Klebsiella pneumoniae (33,3%). The combination of antibiotics was recommended in 75% of cases. The most commonly used antibiotics were cefotaxim (45%) and aminoglycosids (45%). The evolution was favorable in 70% of cases. Septic shock was noted in 30% of cases and secondary sites of sepsis in two cases. One patient was deceased following a septic shock despite intensive antibiotic therapy.

Conclusion : The clinical presentation of older patients with sepsis is often atypical, hence, an early diagnosis and adequate treatment can improve the prognosis.

Seasonal influenza, anti-coronavirus and anti-pneumococcal vaccination coverage among the elderly

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Abstract

Introduction : Elderly patients are particulary affected by infuenza, pneumococcal and coronavirus infections and mortality seems to be significantly higher among this population. Vaccines are nevertheless available to prevent these diseases.

Objective : The aim of our study is to assess the influenza, coronavirus and anti pneumococcal vaccination coverage among elderly in our hospital.

Methods : A prospective observational study was carried out for the elderly patients, admitted in our department between January and April 2023. A form was completed for each patient including comorbidities and vaccination status against COVID 19, seasonal influenza and pneumococcal infections.

Results : Fifty-one elderly patients were included in our study (sex-ratio (M/F)= 1,2). The mean age was 72 years old (± 4 years). The majority of patients were independent (82%, n=42) and about 84% of cases had comorbidities.

Among the comorbidities, diabetes mellitus (n=33 ; 75,9%) and chronic heart failure (n=15 ; 29,4%) accounted for the largest proportion. In addition, 10 patients had an underlying immunosuppression factor (19,6%) : Taking prolonged corticosteroid therapy (11.7%) and immunosuppressive therapy (7.8%).

Among included patients, anti-COVID-19 vaccination coverage was 84,3%, and all of them had recieved at least two doses of vaccine. The influenza vacination coverage was about 39.4%, contrary to anti-pneumococcal vaccination coverage which was 1.9%. The main reason for non-vaccination was a non-medical-prescription.

Conclusion : In opposition to COVID-19 and influenza vaccination, anti-pneumococcal vaccination coverage is very low among hospitalized elderly patients. We should focus our efforts to improve vaccination rate in this specific population.

Does Cardiovascular Disease affect respiratory function and Lung Age in smokers without airflow limitation

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Abstract

Introduction : Emerging research highlights the complex interrelations between respiratory and Cardiovascular Disease(CVD), presenting clinical and research opportunities as well as challenges.

Objective : This study aims to investigate the impact of CVD on respiratory function and Lung Age (LA) in a population of smokers without airflow limitation.

Methods : This retrospective study included patients who underwent PFT in the functional respiratory exploration department of Abdurrahman MAMI hospital of Arianna from 2016 to 2020. Demographic characteristics (age, BMI), Tobacco Consumption (TC) and the modified Medical research council dyspnea scale (mMRC) were recorded for all patients. Spirometry was performed for all study population with measurment of FEV1, FVC, Peak Expiratory Flow(PEF), FEV1/FVC ratio and LA. Subjects were divided into 2 groups of smokers: G1 (patients without CVD) and G2 (patients with CVD).

Results : The study population included 666 patients (539 in G1 and 127 in G2). Means of age and BMI were 52.55±8.64 and 26.48±5.23, respectively. No significant difference has been noted between G1 and G2 in terms of DEP and FEV1/FVC. However, compared to G2,G1 had a significantly lower LA (G1:56.13 ±17.3 vs G2:66.13±15.2; p<0.001) and higher FEV1% (G1: 96.01 ± 11.93 vs G2: 90.5 ± 12.51; p< 0.001) and FVC% (G1: 96.87 ± 13.06 vs G2: 90.5 ± 12.7; p< 0.001).

Conclusion : This study showed that, despite, the absence of airflow limitation, FEV1,FVC and LA decreased in smokers with CVD .