



PREVALENCE OF ANEMIA IN PATIENTS WITH METABOLIC SYNDROME

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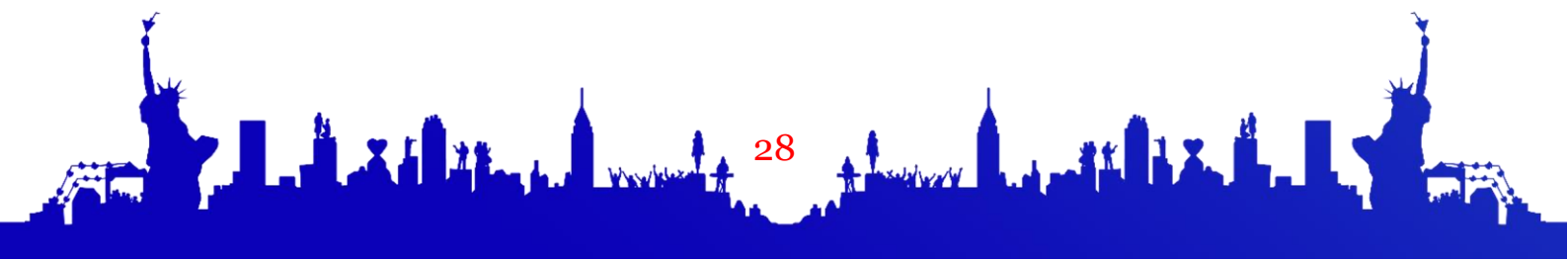
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Background: Metabolic syndrome is a condition linking insulin resistance, dyslipidemia, hyperglycemia, and hypertension that increases the risk of developing diabetes, cardiovascular disease, and subsequent cardiovascular morbidity and mortality. Anemia is more common and more severe in patients with metabolic syndrome compared to patients without metabolic syndrome. Aim: This study was undertaken to determine the prevalence of anemia and the metabolic syndrome with special interest in the coexistence of these two problems as well as the possible links.

Material and methods: In a cross-sectional household survey, 97 men and 112 women aged 20 years and above were interviewed; anthropometric measurements and blood samples were taken. Metabolic syndrome was defined by the International Diabetes Federation. Anaemia was defined as hemoglobin level below 13 g/dL for men and 12 g/dL for women.

Results: The age- adjusted prevalence of metabolic syndrome was 12,4% and of anemia 23,9 %. About 4 percent of the participants had both anaemia and metabolic syndrome. Women had a higher prevalence of both the metabolic syndrome and anemia than men (13,4 vs 7,2 %, 29,4 % vs 15,2%). Anaemia coexisted significantly with all the individual components of the metabolic syndrome. Only 5,7 % of the sample had anaemia without any individual component of metabolic syndrome. In women, the prevalence of combined anaemia and metabolic syndrome peaked in the age group 48-58 years (9,8%). Women in the highest quartile of serum ferritin had a higher risk of only the metabolic syndrome and coexistence of anaemia and metabolic syndrome.

Conclusion: The high prevalence of the metabolic syndrome and anaemia in the area show the urgent need to develop comprehensive strategies aimed at prevention and treatment. In women this coexistence may be related to inflammation but further investigations is needed. Correction of anemia may have a significant role in prevention of complications related with metabolic syndrome.





Использованная литература:

1. Блиндарь В.Н., Зубрихина Г.Н., Матвеева И.И. с соавт. Ферритин, растворимые рецепторы трансферрина, эрит ропоэтин у онкологических больных с анемическим синдромом // Материалы конгресса. XI Российский онкологический конгресс. – 2007. – С.233.
2. Вокалюк Р.М., Дворецкий Л.И., Заспа Е.А. Стратегия и тактика ведения больных железодефицитной анемией // Русский медицинский журнал. – 2008. – т.16. – №7. – С.443432.
3. Войнов В.А. Эфферентная терапия // 2006. – т.4. – С.304.
4. Дворецкий Л.И. Алгоритмы диагностики и лечения анемий // Русский медицинский журнал. – 2003. – т.11. – №8. – С.427433.
5. Дементьева И.И. Клинические аспекты состояния и регуляции кислотноосновного гомеостаза // 2003. – №2. – С.241313.
6. Henke M., Laszig R., Rube C. et al. Erythropoietin to treat head and neck cancer patients with anaemia undergoing radiotherapy: randomised, doubleblind, placebocontrolled trial // Lancet. – 2003. – Vol.362. – №9392. – P.1233 1260.
7. Hoffman P. C. Immune hemolytic anemia—selected topics // Hematology.Am.Soc.Hematol.Educ.Program. – 2006. – P.1318.
8. Hoorn E.J., Halperin M.L., Zietse R. Diagnostic approach to a patient with hyponatraemia: traditional versus physiology based options // QJM. – 2003. – Vol.98. – №7. – P.329340.
9. Mange, Kevin, Matsuura, Dean, Cizman, Borut et al. Language Guiding Therapy: The Case of Dehydration versus Volume Depletion // Ann.Intern.Med. – 1997. – Vol.127. – №9. – P.848833.
10. Onitilo A.A., Kio E., Doi S.A. Tumorrelated hyponatremia // Clin. Med.Res. – 2007. – Vol.3. – №4. – P.228237.
11. Scrijvers D., Roila F. On behalf of the ESMO Guidelines Working Group Erythropoiesisstimulating agents in cancer patients: ESMO Recommendations for use // Ann.Oncol. – 2009. – Vol.20, suppl. 4. – P.iv139iv161. \
12. Tonelli M., Hemmelgarn B., Reiman T. et al. Benefits and harms of erythropoiesisstimulating agents for anemia related to cancer: a metaanalysis // CMAJ. – 2009. – Vol.180. – №11. – P.E62E71.

