

论著

5 708例健康体检人群中慢性肾脏疾病的调查分析

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摘要:

目的: 探讨健康体检人群中慢性肾脏疾病(chronic kidney disease, CKD)的患病情况及其相关危险因素。方法: 2008年1月至2011年6月在中南大学湘雅三医院健康管理中心进行健康体检并且资料完整的年龄20岁以上的体检人群为研究对象, 分别记录受检者CKD及相关危险因素的检测结果和问卷调查的结果。对CKD的相关危险因素分析采用多因素logistic回归分析。CKD的判断标准为微量白蛋白尿和(或)血尿和(或)肾功能下降[估算肾小球滤过率(eGFR)<60 mL/(min.1.73 m2)]。以简化的肾脏病膳食改良(modification of diet in renal disease, MDRD)公式计算eGFR。结果: 在最终入选的5 708例体检人群中白蛋白尿、肾功能下降和血尿的检出率分别为25.0%, 1.7%和1.1%, 总CKD的检出率为25.6%。CKD1~5期的检出率分别为17.8%, 6.7%, 1.1%, 0和0。多因素logistic回归分析显示糖尿病、高血压、高胆固醇血症、男性、年龄和吸烟是CKD的独立危险因素, 运动量增加是CKD的保护因素。结论: 健康体检是筛查CKD的重要途径。戒烟, 控制血糖、血压、血脂及增加运动量可能有利于降低CKD的发病率。

关键词: 慢性肾脏病 患病率 流行病学 危险因素

Chronic kidney disease in 5 708 people receiving physical examination

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Abstract:

Objective: To investigate chronic kidney disease (CKD) and its risk factors in people receiving physical examination.

Methods: This retrospective study included people over 20 years old who had physical examination in the Health Management Center of Third Xiangya Hospital from Janurary 2008 to June 2011. CKD and its risk factors as well as questionnaire were recorded. The risk factors were analyzed by multivariate logistic analysis. CKD was defined by kidney damage (microalbuminuria≥30 mg/L) and/or hematuria and/or reduced kidney function [evaluate glomerular filtration rate (eGFR)<60 mL/(min.1.73 m2)]. We counted eGFR according to the modification of diet in renal disease (MDRD).

Results: A total of 5 708 physical examination reports were included. The detection rate of albuminuria, reduced renal function and hematuria was 25.0%, 1.7% and 1.1%. The detection rate of CKD was 25.6%, and detection rate of CKD stage 1-5 was 17.8%, 6.7%, 1.1%, 0 and 0, respectively. Multivariate logistic analysis indicated that diabetes mellitus, hypertension, hypercholesterolemia, male, age, and smoking were the risk factors for CKD. Increasing physical activity was the protective factor against CKD.

Conclusion: High prevalence of CKD in people receiving physical examination is found in Changsha, especially stage 1 and 2 CKD. Physical examination is important to screen CKD. Stopping smoking, control of blood glucose, blood pressure, blood lipids and increasing physical activity may help reduce the prevalence of CKD.

Keywords: chronic kidney disease prevalence epidemiology risk factor

收稿日期 2013-10-29 修回日期 网络版发布日期

DOI: 10.11817/j.issn.1672-7347.2014.04.015

基金项目:

扩展功能

本文信息

Supporting info

PDF(446KB)

[HTML全文]

参考文献[PDF]

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湖南省科技厅社会发展科技支撑重点项目(2011SK2012)；湖南省工程技术研究中心建设项目(2009TP4026)。  
This  
work was supported by the Project of key program of Hunan Science and Technology Foundation  
(2011SK2012) and the fund from Hunan Provincial Technology Center, P. R. China (2009TP4026).

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参考文献:

1. Levey AS, Bosch JP, Lewis JB, et al. A more accurate method to estimate glomerularfiltration rate from serum creatinine. Modification of Diet in Renal Disease Study Group  
[ J]. Ann Intern Med, 1999, 130(6): 461-470.

2. Anonymous. KDOQI clinical practice guidelines for chronic kidney disease: evaluation, classification, and stratification. Kidney Disease Outcome Quality Initiative  
[ J]. Am J kidney Dis, 2002, 39 (Suppl 2): S1-S246.

3. Centers For Disease Control and Prevention (CDC). Prevalence of chronic kidney disease and associated risk factors-United States, 1999-2004  
[J]. MMWR Morb Mortal Wkly Rep, 2007, 56(8): 161-165.

4. Chadban SJ, Briganti EM, Kerr PG, et al. Prevalence of kidney damage in Australian adults: The AusDiab kidney study  
[ J]. J Am Soc Nephrol, 2003, 14(7 Suppl 2): S131-S138.

5. Hallan SI, Coresh J, Astor BC, et al. International comparison of the relationship of chronic kidney disease prevalence and ESRD risk  
[ J]. J Am Soc Nephrol, 2006, 17(8): 2275-2284.

6. 张路霞, 左力, 徐国宾, 等. 北京市石景山地区中老年人人群中慢性肾脏病的流行病学研究  
[ J]. 中华肾脏病杂志, 2006, 22(2): 67-71.

ZHANG Luxia, ZUO Li, XU Guobing, et al. Community-based screening for chronic kidney disease among population older than 40 years in Beijing  
[ J]. Chinese Journal of Nephrology, 2006, 22(2): 67-71.

7. 黄燕萍, 王伟铭, 裴道灵, 等. 上海城市社区成年人群慢性肾脏病流行病学研究  
[ J]. 中华肾脏病杂志, 2008, 24(12): 872-877.

HUANG Yanping, WANG Weiming, PEI Daoling, et al. Communitybased study on adult chronic kidney disease and its associated risk factors in Shanghai  
[ J]. Chinese Journal of Nephrology, 2008, 24(12): 872-877.

8. 陈巍, 王辉, 董秀清, 等. 广州市城区普通人群中慢性肾脏病的流行病学研究  
[ J]. 中华肾脏病杂志, 2007, 23(3): 147-151.

CHEN Wei, WANG Hui, DONG Xiuqing, et al. Epidemiologic study of chronic kidney disease in Guangzhou urban area  
[ J]. Chinese Journal of Nephrology, 2007, 23(3): 147-151.

9. 中华医学会肾脏病分会透析移植登记工作组. 1999年度全国透析移植登记报告  
[ J]. 中华肾脏病杂志, 2001, 17(2): 77-78.

Dialysis and Transplantation Registration Group, Chinese Society of Nephrology, Chinese Medical Association. The report about the registration of dialysis and transplantation in China 1999  
[ J]. Chinese

- Journal of Nephrology, 2001, 17(2): 77-78.
10. Golan L, Birkmeyer JD, Welch HG. The cost-effectiveness of treating all patients with type 2 diabetes with angiotensin-converting enzyme inhibitors  
[ J]. Ann Intern Med, 1999, 131(9): 660-667.
11. Boulware LE, Jaar BG, Tarver-Carr ME, et al. Screening for proteinuria in US adults: a cost-effectiveness analysis  
[ J]. JAMA, 2003, 290(23): 3101-3114.
12. 中国高血压防治指南修订委员会. 中国高血压防治指南 2010  
[J]. 中华心血管病杂志, 2011, 39(7): 579-616.  
Writing Group of 2010 Chinese Guidelines for the management of hypertension. 2010 Chinese guidelines for the management of hypertension  
[ J]. Chinese Journal of Cardiology, 2011, 39(7): 579-616.
13. 中华医学会糖尿病学分会. 中国2型糖尿病防治指南(2010年版)  
[ J]. 中国糖尿病杂志, 2012, 20(1): S1-37.  
Chinese Diabetes Society. 2010 Chinese guidelines for the management of diabetes  
[ J]. Chinese Journal of Diabetes, 2012, 20(1): S1-37.
14. 赵文华, 张坚, 由悦, 等. 中国18岁及以上人群血脂异常流行特点研究  
[ J]. 中华预防医学杂志, 2005, 39(5): 306-310.  
ZHAO Wenhua, ZHANG Jia, YOU Yue, et al. Epidemiologic characteristics of dyslipidemia in people aged 18 years and over in China  
[ J]. Chinese Journal of Preventive Medicine, 2005, 39(5): 306-310.
15. 北京市透析移植登记小组. 1999年度北京市透析移植登记报告  
[ J]. 中华肾脏病杂志, 2001, 17(2): 79-82.  
Beijing Dialysis and Transplantation Registration Group. The report about the registration of dialysis and transplantation in Beijing 1999  
[ J]. Chinese Journal of Nephrology, 2001, 17(2): 79-82.
16. 辽宁省透析移植登记小组. 1999年度辽宁省透析移植登记报告  
[ J]. 中华肾脏病杂志, 2001, 17(2): 89-90.  
Liaoning Province Dialysis and Transplantation Registration Group. The report about the registration of dialysis and transplantation in Liaoning Province 1999  
[ J]. Chinese Journal of Nephrology, 2001, 17(2): 89-90.
17. Cockcroft DW, Gault MH. Prediction of creatinine clearance from serum creatinine  
[ J]. Nephron, 1976, 16(1): 31-41.
18. Hillege HL, Janssen WMT, Bak AA, et al. Microalbuminuria is common, also in a nondiabetic, nonhypertensive population, and an independent indicator of cardiovascular morbidity  
[ J]. J Intern Med, 2001, 249(6): 519-526.
19. Iseki K, Iseki C, Ikemiya Y, et al. Risk of developing end-stage renal disease in a cohort of mass screening  
[ J]. Kidney Int, 1996, 49(3): 800-805.
20. 王德光, 胡世莲, 任伟, 等. 合肥市成年体检人群慢性肾脏病患病率及相关危险因素调查  
[ J]. 中华肾脏病杂志, 2009, 25(3): 176-180.  
WANG Deguang, HU Shilian, REN Wei, et al. Study on prevalence and associated risk factors of chronic kidney disease in adult population receiving body check from urban area of Hefei Anhui

[ J]. Chinese

Journal of Nephrology, 2009, 25(3): 176-180.

21. 温继兰, 王凤仙, 李秉程, 等. 山西省右玉县城镇成人慢性肾脏病的流行病学研究

[ J]. 中华肾脏病杂志, 2010, 26(2): 99-104.

WEN Jilan, WANG Fengxian, LI Bingcheng, et al. Epidemiologic study of urban adult chronic kidney disease in Youyu county of Shanxi province

[ J]. Chinese Journal of Nephrology, 2010, 26(2): 99-104.

22. 孙妍蓓, 刘宏, 武鸣, 等. 江苏两个地区老年人群慢性肾脏病的分层随机抽样调查

[ J]. 中华肾脏病杂志, 2010, 26(11): 812-817.

SUN Yanbei, LIU Hong, WU Ming, et al. Prevalence of chronic kidney diseases and associated factors on the basis of stratified random sampling among elderly people in two districts of Jiangsu province, China

[ J]. Chinese Journal of Nephrology, 2010, 26(11): 812-817.

23. World Health Organization. World health report 2003

[M]. Geneva:

WHO, 2003.

24. World Health Organization. Report on the global tobacco epidemic: The MPOWER package

[M]. Geneva: WHO, 2008.

25. Levey AS, Coresh J, Balk E, et al. National Kidney Foundation practice guidelines for chronic kidney disease: evaluation, classification, and stratification

[ J]. Ann Intern Med, 2003, 139(2): 137-147.

26. Garg AX, Kiberd BA, Clark WF, et al. Albuminuria and renal insufficiency prevalence guides. population screening: results from the NHANES III

[ J]. Kidney Int, 2002. 61(6): 2165-2175.

27. 罗洋, 谌贻璞, 李文歌, 等. 云南省西双版纳地区成人慢性肾脏病流行病学调查

[ J]. 中华肾脏病杂志, 2008, 24(9): 609-613.

LUO Yang, SHEN Yipu, LI Wenge, et al. Epidemiologic investigation of adult chronic kidney disease in the Xishuangbanna district of Yunnan province

[ J]. Chinese Journal of Nephrology, 2008, 24(9): 609-613.

28. 赵红娟, 陆晨, 岳华, 等. 乌鲁木齐市天山区35岁以上成人慢性肾脏病流行病学调查及相关因素分析

[ J]. 中华肾脏病杂志, 2010,

26(6): 409-415.

ZHAO Hongjuan, LU Chen, YUE Hua, et al. Epidemiology investigation and associated factors analysis of chronic kidney disease among adults older than 35 years in Tianshan district of Urumqi, Xinjiang

[ J]. Chinese Journal of Nephrology, 2010, 26(6): 409-415.

29. 徐潇漪, 多景华, 罗洋, 等. 内蒙古呼伦贝尔地区成人慢性肾脏病流行病学调查

[ J]. 中华肾脏病杂志, 2010, 26(6): 422-426.

XU Xiaoyi, DUO Jinghua, LUO Yang, et al. Epidemiology investigation of adult chronic kidney disease in the Hulunbeir Prefecture, Inner Mongolia autonomous region

[ J]. Chinese Journal of Nephrology,

2010, 26(6): 422-426.

本刊中的类似文章

1. 谭红专, 周价, 李硕硕, 张继海, .115对胃癌病例对照研究[J]. 中南大学学报(医学版), 2002,27(4): 379-382
2. 彭佑铭, 刘伏友, 彭海清, 向福坤, 刘映红, 李健君, .3547例慢性肾脏病患者原发疾病构成及危险因素分析[J]. 中南大学学报(医学版), 2006, 31(03): 400-403
3. 张亚辉, 曹凡, 李律平, 杨小英, 武强, 陶小伟, 陈本真, 李红艳, .100例体外循环心脏手术后急性肾损伤的围手术期危险因素分析[J]. 中南大学学报(医学版), 2006, 31(05): 621-628

4. 凌光辉1, 曾妮2, 刘家军3, 彭佑铭1, 段绍斌1, 夏运成1, 刘虹1, 刘映红1, 李军1, 李瑛1, 孙林1, 刘伏友1.5 100例体外循环心脏手术后急性肾损伤的围手术期危险因素分析[J]. 中南大学学报(医学版), 2009,34(09): 861-866
5. 陈平洋1, 谢宗德1, 吴勇2, 季美君2, 赵斯卿2.长沙市5年围生儿出生缺陷监测结果分析[J]. 中南大学学报(医学版), 2007,32(03): 520-523
6. 金湘东1, 代丽萍2, 3, 张建营2, 3, 张校辉2, 3, 王鹏2, 3, 聂轶飞2, 3, 王平2, 3, 徐学琴2, 3, 王凯娟2, 3.河南省农村地区胃癌危险因素病例对照家系研究[J]. 中南大学学报(医学版), 2007,32(05): 782-785
7. 阙国鹰, 侯雯.长沙市开福区2~4岁儿童龋病流行病学调查分析[J]. 中南大学学报(医学版), 2009,34(01): 76-80
8. 王峻, 刘颖娟, 李向平, 彭道泉, 谭峥, 刘鸿敏, 秦英楠, 薛彦琼.组织蛋白酶L与冠心病及其危险因素的相关性[J]. 中南大学学报(医学版), 2009,34(02): 130-134
9. 李新华1, 廖兵荣1,2, 刘健3, 谭红专1, 黄文繁4, 克瓦库1, 刘薇1, 黄昕1, 文师吾1, 5.长沙和深圳市儿童肥胖症患病率与危险因素研究[J]. 中南大学学报(医学版), 2010,35(1): 11-16
10. 刘红1, 2, 胡永华1.遗传流行病学研究中的H-W平衡检验[J]. 中南大学学报(医学版), 2010,35(1): 90-93
11. 冯琼, 周智广\*, 唐炜立, 杨晓琳, 龙欣 .3种代谢综合征工作定义在男性健康体检者中的比较[J]. 中南大学学报(医学版), 2005,30(2): 130-134
12. 王浩, 李硕硕\*, 张磊, 张静, 戴伟 .湖南省鼻咽癌非病毒影响因素的条件logistic回归分析[J]. 中南大学学报(医学版), 2005,30(3): 356-357
13. 林国强1,\*, 蒋海河1, 李迎秋2 .冠心病患者血浆血管性血友病因子、可溶性E-选择素的变化及意义[J]. 中南大学学报(医学版), 2005,30(4): 399-402
14. 欧迪鹏, 杨连粤\*, 黄耿文, 陶一明, 丁翔, 常志刚.肝细胞癌术后复发转移相关危险因素分析[J]. 中南大学学报(医学版), 2005,30(5): 540-543
15. 刘虹, 彭佑铭, 李娟, 刘映红, 成梅初, 袁芳, 刘伏友 .3547例慢性肾脏病患者分期及相关因素分析[J]. 中南大学学报(医学版), 2010,35(5): 499-