中南大学学报(医学版) 2013, 38(3) 258-261 DOI: 10.3969/j.issn.1672-

7347.2013.03.007 ISSN: 1672-7347 CN: 43-1427/R

本期目录 | 下期目录 | 过刊浏览 | 高级检索

[打印本页] [关闭]

论著

2型糖尿病患者行腹腔镜Roux-en-Y胃旁路手术后内脂素水平变化

刘轶群¹,熊静¹,何红晖¹,朱晒红²,莫朝晖¹

- 1. 中南大学湘雅三医院 内分泌科, 长沙410013;
- 2. 中南大学湘雅三医院 普外科, 长沙410013

摘要: 目的:观察2 型糖尿病(Type 2 diabetes mellitus, T2DM) 患者行腹腔镜下Roux-en-Y 胃旁路手术后血清内脂素水平变化,并探讨其与术后胰岛素抵抗、糖尿病改善的关系。方法:33 例T2DM 患者行腹腔镜下Roux-en-Y 胃旁路术,采用酶联免疫吸附实验检测其术前及术后3 个月空腹血清内脂素水平,并同时检测空腹血糖(fasting plasmglucose, FPG)、糖化血红蛋白(human glycated hemoglobin A1c, HbA1c)、空腹胰岛素(fasting insulin, FINS) 等。结果:腹腔镜Roux-en-Y 胃旁路手术后,HbA1c, FINS,胰岛素抵抗指数均较术前下降,体质量指数 [(24.53 \pm 0.62) kg/m²] 较术前[(26.71 \pm 0.69) kg/m²] 下降,且差异有统计学意义(P<0.001),血清内脂素水平 [(9.79 \pm 0.64) ng/mL] 也明显低于术前[(38.24 \pm 5.32) ng/mL],差异具有统计学意义(P<0.001)。结论:T2DM 患者腹腔镜Roux-en-Y 胃旁路手术后内脂素水平变化可能与术后胰岛素抵抗、糖尿病改善有一定的关系。

关键词: 2型糖尿病 胃旁路手术 内脂素

Visfatin level after laparoscopic Roux-en-Y gastric bypass surgery in patients with Type 2 diabetes

LIU Yigun¹, XIONG Jing¹, HE Honghui¹, ZHU Shaihong², MO Zhaohui¹

- 1. Department of Endocrinology, Third Xiangya Hospital, Central South University, Changsha 410013, China:
- 2. Department of General Surgery, Third Xiangya Hospital, Central South University, Changsha 410013, China

Abstract: Objective: To investigate the change in serum visfatin level after laparoscopic Roux-en-Y gastric bypass surgery in patients with Type 2 diabetes mellitus (T2DM) and to explore the relationship between visfatin insulin resistance and diabetes.

Methods: Thirty-three patients with Type 2 diabetes were studied before and after the gastric bypass surgery. The level of fasting serum visfatin was measured by enzyme-linked immunosorbent assay. Fasting plasma glucose (FPG), glycated hemoglobin (HbA1c) and fasting insulin (FINS) were measured before and after the gastric bypass surgery.

Results: Compared with before the operation, the indicators of HbA1c, FINS, and insulin resistance index (HOMA-IR) were decreased after the laparoscopic Roux-en-Y gastric bypass surgery. The body mass index (BMI) [(24.53 ? 0.62) kg/m 2 vs (26.71 ? 0.69) kg/m 2] was decreased, with significant difference (P<0.001). The serum visfatin level [(9.79 ? 0.64) ng/mL] was significantly lower than before the operation [(38.24 ? 5.32) ng/mL], with significant difference (P<0.001).

Conclusion: Serum level of visfatin is decreased in T2DM patients who undergo gastric bypass surgry, reflecting an improvement in insulin resistance and diabetes.

Keywords: Type 2 diabetes mellitus gastric bypass surgery visfatin

收稿日期 2012-02-20 修回日期 网络版发布日期

DOI: 10.3969/j.issn.1672-7347.2013.03.007

基金项目:

通讯作者: 莫朝晖, Email: easd04mzh@126.com

作者简介: 刘轶群, 硕士研究生, 主要从事代谢综合征的手术治疗。

作者Email: easd04mzh@126.com

参考文献:

- 1. Brown JE, Onyango DJ, Ramanjaneya M, et al. Visfatin regulates insulinsecretion, insulin receptor signalling and mRNA expression of diabetes relatedgenes in mouse pancreatic β -cells [J] . J Mol Endocrinol, 2010, 44(3): 171-178.
- 2. Fukuhara A, Matsuda M, Nishizawa M, et al. Vinfatin: a proteinsecreted by visceral fat that mimics the effects of insulin [J]. Science, 2005, 307(9): 426-430.

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF<u>(869KB)</u>
- ▶[HTML全文]
- ▶参考文献[PDF]
- ▶参考文献

服务与反馈

- ▶把本文推荐给朋友
- ▶加入我的书架
- ▶加入引用管理器
- ▶ 引用本文
- ▶ Email Alert
- ▶ 文章反馈
- ▶浏览反馈信息

本文关键词相关文章

- ▶2型糖尿病
- ▶胃旁路手术
- ▶ 内脂素

本文作者相关文章

- ▶ 刘轶群
- ▶熊静
- ▶ 何红晖
- ▶ 朱晒红
- ▶莫朝晖

PubMed

- Article by LIU Yiqun
- Article by XIONG Jing
- Article by HE Honghui
- Article by ZHU Shaihong
- Article by MO Zhaohui

- 3. Li L, Yang G, Li Q, et al. Changes and relations of circulating visfatin, apelin, and resistin levels in normal, impaired glucose tolerance, and Type 2 diabetic subjects [J]. Exp Clin Endocrinol Diabetes, 2006, 114(10): 544-548.
- 4. Uslu S, Kebapci N, Kara M, et al. Relationship between adipocytokinesand cardiovascular risk factors in patients with Type 2 diabetesmellitus [J]. Exp Ther Med, 2012, 4(1): 113-120.
- 5. Kloting N, Kloting I. Visfatin: gene expression in isolated adipocytesand sequence analysis in obese WOKW rats compared with lean controlrats [J] . Biochem Biophys Res Commun, 2005, 332(17): 1070-1072.
- 6. Chen MP, Chung FM, Chang DM, et al. Elevated plasma level of visfatin/pre-B cell colony-enhancing factor in patients with Type 2diabetes mellitus [J]. J Clin Endocrinol Metab, 2006, 91(1): 295-299.
- 7. Rao RS, Kini S. Diabetic and bariatric surgery: A review of the recenttrends [J]. Surg Endosc, 2012, 26(4): 893-903.
- 8. Swarbrick MM, Stanhope KL, Austrheim-Smith IT, et al. Longitudinalchanges in pancreatic and adipocyte hormones following Roux-en-Ygastric bypass surgery [J]. Diabetologia, 2008, 51(10): 1901-1911.
- 9. Krzyzanowska K, Mittermayer F, Krugluger W, et al. Increase in visfatinafter weight loss induced by gastroplastic surgery [J]. Obesity(SilverSpring), 2006, 14(11): 1886-1889.
- 10. MacLaren R, Cui W, Cianflone K, et al. Visfatin expression is hormonally regulated by metabolic and sex hormones in 3T3-L1 pre-adipocytes and adipocytes [J]. Diabetes Obes Metab, 2007, 9(4): 490-497.
- 11. Auguet T, Terra X, Porras JA, et al. Plasma visfatin levels and geneexpression in morbidly obese women with associated fatty liverdisease [J]. Clin Biochem, 2013, 46(3): 202-208.

本刊中的类似文章

- 1. 王勇军1, 余平2.多囊卵巢综合征患者血清内脂素、脂联素、瘦素的变化及临床意义[J]. 中南大学学报(医学版), 2009,34(01): 72-75
- 2. 廖岚*, 雷闽湘, 陈慧玲, 吴嘉, 郭丽娟 高敏C-反应蛋白与2型糖尿病肾病[J]. 中南大学学报(医学版), 2004,29(6): 627-630
- 3. 朱雪婧, 刘伏友, 彭佑铭, 刘虹, 袁曙光, 许向青, 刘映红, 孙林, 凌光辉.糖尿病肾病病理分型最新国际标准的临床应用(附37 例回顾性分析)[J]. 中南大学学报(医学版), 2012,37(2): 185-189
- 4. 叶爱玲, 张红, 彭依群, 廖二元.视黄醇结合蛋白4 与2 型糖尿病骨代谢的关系[J]. 中南大学学报(医学版), 2012,37(2): 197-202
- 5. 侯宇, 刘莎, 朱婷婷, 张奂, 刘刚, 朱艳, 陈慧玲.利用ROC曲线评价振动觉阈值检查在糖尿病周围神经病变诊断中的意义[J]. 中南大学学报(医学版), 2012,37(9): 951-956

Copyright by 中南大学学报(医学版)