Expression and significance of intraglomerular interleukin-2 receptor in proliferative glomerulonephritis

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Abstract Objective: To investigate the relationship between the accumulation of extracellular matrix (ECM) and the expression of interleukin-2 receptor (IL-2R) of intraglomerular mononuclear cells (MNC) in proliferative glomerulonephritis (PGN). Methods: Expression of IL-2R and T-cell infiltration were studied with immunohistochemistry. Accumulation of ECM was measured with PAS staining and then analyzed with computer image analysis system. Results: The number of IL-2R positive MNCs and T-cells was significantly increased in PGN ($P < 0.01$ *vs* the normal) and no IL-2R positive NMC was found in normal kidneys. The accumulation of ECM was higher in PGN than in the control and was positively correlated to the number of IL-2R positive MNC ($P < 0.05$) in PGN. Conclusion: Our findings suggest that the expression of IL-2R was involved in the accumulation of ECM in PGN, which implies the involvement of the activation of local cellular immunity in the pathogenesis of PGN.

Key words interleukin-2 receptor; extracellular matrix; proliferative glomerulonephritis

40例糖尿病视网膜病变的临床分析

Clinical analysis of 40 cases of diabetic retinopathy

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糖尿病视网膜病变 (Diabetic retinopathy, DR)成为眼科主要致盲眼病之一[1]。早期诊断,并探讨发病的危险因素,对糖尿病视网膜病变的早期防治和降低其致盲率有重要意义[2]。为此我们对II 型糖尿病患者进行了眼底荧光血管造影检查及系统的全身和眼部检查,对影响糖尿病视网膜病变的全身危险因素进行了一些探讨。

1 一般资料

1.1 研究对象

根据临床症状、血糖、尿糖定量检查,根据 WHO 诊断标准,确诊为II 型糖尿病,曾用过胰岛素、抗糖尿病药物和饮食控制的,正在我院内科住院或门诊随访观察的患者 40例。在排除严重心、肝、肾疾患,过敏体质及多种药物过敏史后,进行眼底荧光血管造影。40例中,男性 23例,女性 17例;最小年龄 26岁,最大年龄 74岁,平均 54岁;病程最短者 1月,最长者 13年,平均 4.9年。

1.2 药物

20% 荧光素钠注射剂 5 ml

1.3 仪器

日本 Topcon TRC-WT3型眼底摄像机。胶卷:国产乐凯牌负片。

1.4 方法

充分散大瞳孔,先拍摄眼底黑白普通照片,然后按常规进行眼底荧光血管造影。造影的底片于 X线观片灯下用放大镜对比观察,并全部扩印成 2寸照片对比观察。

2 结果

所有糖尿病视网膜病变的诊断均按我国 1984年制订的糖尿病视网膜病变临床分期标准[3]。其中 33眼为I 型, 5眼为II 型, 11眼III型, 2眼为V 型。

II 型糖尿病病程少于 5年有 23例, 5~ 10年有 6例, 10年以上有 11例。II 型糖尿病患者年龄小于 40岁 2人, 40岁以上者 38人。

与高血压的关系: 2例高血压患者均发生 DR, 38例非高血压患者有 28人患有 DR。

与糖尿病肾病的关系 (有 19例检查了肾功、肾图、尿蛋白定量、β_2-mG): 13例 DN 患者有 9例发生 DR, 6例非 DN 患者有 5例发生 DR。

3 讨论

早期诊断是对糖尿病视网膜病变进行有效防治的前提。眼底荧光血管造影能够动态地观察视网膜血液循环状态和血管改变,并能揭示检眼镜下"正常"眼的早期糖尿病视网膜病变[4]。这表明眼底荧光血管造影检查是诊断早期糖尿病视网膜病变的较好方法[5]。

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(收稿: 1999-03-25;修回: 1999-07-09)

(编辑 王 红)

Effects of early enteral feeding on degradation of skeletal muscle protein after severe scalding in rats

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Abstract **Objective**: To determine whether early enteral feeding (EEF) can reduce postburn skeletal muscle protein hypercatabolism. **Methods**: Wistar rats were fed with ENSURE fluid in the early or late stage after being inflicted with 37% TBSA full-thickness skin scalding injury. On the 5th day after injury, tyrosine-releasing rate and the proteolytic activity of 20S proteinase complex from soleus, the serum levels of TNF and cortisol were measured. **Results**: Tyrosine-releasing rate and the proteolytic activity of 20S proteinase complex from scalded rats' soleus, the serum levels of TNF and cortisol were significantly lower in rats fed in the early stage than in those fed in the late stage after scalding. **Conclusion**: EEF is effective to reduce postscalding skeletal muscle protein hypercatabolism by preventing excessive secretion of TNF and cortisol.

Key words scalding injury; early enteral feeding; skeletal muscle protein degradation; 20S proteinase complex; TNF; cortisol

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病程与糖尿病视网膜病变呈现出明显的正相关关系,在 1 ~ 10年间,随着时间的延长,发生的比例呈上升趋势,并提示多于 15年不发生者,以后一般较少发生。

随着年龄的增长,糖尿病视网膜病变发生率随之增高。研究结果是 40岁以上者发生率较青年人发生率高,可能是年龄增大后血管机能有所降低所致。

高血压者并发糖尿病视网膜病变发生率高。可能是高血压对血管功能结构的损害加快了 DR的发展。

DN者有 69.2%的患者发生 DR,大大超过半数,表明两者平行相关。两者的病理基础同是微血管病变和微循环障碍,而且均为退行性变,随着病程的延长,最终可导致视力丧失和肾功能衰竭[6]。

II 型糖尿病患者常伴有脂代谢的异常(占 50%),甘油三脂增多较多见。本研究结果表明,早期糖尿病视网膜病变与甘油三脂呈显著正相关。揭示早期治疗高脂血症有利于DR的防治。

关键词 糖尿病视网膜病 诊断;高血糖;年龄;荧光血管造影术

中图法分类号 R587.1

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(收稿: 1998-08-17;修回: 1999-01-24)

(编辑 汪勤俭)

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