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The relationship between endothelin and cerebral blood flow after head injury of rabbits

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Abstract Objective: To investigate the relationship between endothelin (ET) and cerebral blood flow (CBF) after head injury. Methods: Based on the model of the graded intensified head injury, developed by the BIM-Ⅱ bioimpactor striking the fronto-parital zone of the rabbits, the changes of ET in plasma, CSF, brain tissues of different regions, and CBF of the same brain regions were observed with RIA and hydrogen clearance methods respectively, and their relationship was analyzed. Results: During 24 h after injury, ET in plasma, CSF and brain tissues of different regions were increased consistently with injury severity. The changing tendencies of ET in CSF and brain tissues were the same. The changes of CBF was negatively correlated with those of ET in CSF and brain tissue of the same region in the same group. Conclusion: The increase of ET may be one of the main causes to result in brain ischemia and its development after head injury.

Key words head injury; endothelin; cerebral blood flow

一种治疗局限性粘液性水肿的新方法

A new method for treating localized myxedema

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自身免疫性甲状腺疾病患者约3%可并发局限性粘液性水肿(Localized myxedema),治疗这类水肿尚缺乏有效稳定的方法。近年我们使用利美达松局部注射治疗10例 Graves'病伴局限性粘液性水肿患者,疗效甚佳,随访1～3年均未复发,报告如下。

1 临床资料

10例 Graves'病患者,女性6例,男性4例;年龄48～62岁,确诊甲亢1～5年。TgAb 和 TmAb 均阳性或强阳性,伴发局限性粘液性水肿6月至3年。3例在甲亢治疗期间出现。全部患者同时伴有轻或中度浸润性突眼。皮肤病变全部为双侧,表现为下肢下端,尤其是胫前及足背广泛,界限不清,坚韧厚实的皮肤肿胀,其间有1个或数个斑块状或结节状突起,皮肤粗糙如桔皮,毛孔变粗,其中一女性患者因水肿3年,局部皮肤呈棕褐色改变,有痒感。2例行胫前病变皮肤组织活检,证实为局限性粘液性水肿。10例确诊甲亢后均在我院行正规抗甲状腺药物治疗,用利美达松治疗前,6例已减至维持量,其中4例维持量较大(他巴唑10 mg/d 或丙基硫氧嘧啶100 mg/d),继续减量则甲亢症状复发,4例在减量期。出现局限性粘液性水肿后酌情增加了甲状腺片的用量(40～60 mg/d)。其中1例曾先后3次住院,反复局部注射氢化考的松、透明质酸酶20余次,以减轻局部水肿,停止注射后,结节性肿胀又复原。

治疗方法:在继续使用抗甲状腺药物及甲状腺片的基础上,选用日本株式会社绿十字生产的缓释型氟美松制剂——利美达松(Limethason)注射剂4 mg,一次局部注射入结节部位,多个结节病变者间隔半月或一月可再行注射,病变广泛、局部症状明显、突眼明显者可同时静脉注射利美达松4 mg。用药半月后查尿17-OH、17-KS,治疗前后均查 TgAb 及 TmAb。

2 结果

6例皮损范围直径在5 cm～10 cm 内的患者,一次注射后,结节状病变变软、变小、逐渐消失,随访1～3年,未复发。3例双足背多结节患者于不同部位注射2次,每次间隔1月,注药部位结节消失。1例足背、胫前多个结节状肿胀,病程达3年的患者,分别在4个部位,每次间隔20天,连续用药4次(每次只注射一个部位,剂量4 mg),同时静脉注射利美达松4 mg 两次,4个月后,双下肢肿胀明显减轻,结节样病变变软、缩小,色素沉着减轻。两年后随访,局限性粘液性水肿完全消失,小剂量抗甲状腺药物治疗,病情稳定。

静脉注射利美达松的患者,突眼引起的流泪、畏光等症状减轻,其余无改变。

4例 TgAb 及 TmAb 转阴,其中1例为同时静脉用药者。6例仍为阳性。

尿17-OH、17-KS 在正常范围。

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价，尚待临床通过前瞻性、双盲、随机对照研究进一步明确。

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Clinical study of diagnosis and treatment of acute respiratory distress syndrome*

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Abstract **Objective**：We evaluated the clinical significance of acute lung injury (ALI)，acute respiratory distress syndrome (ARDS)，systemic inflammatory response syndrome (SIRS) and multiple organ dysfunction syndrome (MODS) and observed the types of acid-base disorders and effects of corticosteroids on ARDS. **Methods**：Retrospective study of clinical cases. **The results and conclusions**：①The patients in the ARDS group had a higher mortality (51.3% versus 20.5%) than those in the other groups. It indicated that the distinction between ALI and ARDS may be useful for clinical treatment；②Infection and trauma were the common factors of SIRS. The severity of SIRS was correlated with the occurrence of MODS and might predict the prognosis of ARDS；③Patients with ARDS had a high incidence of acid-base disorders (98.3%) in which mixed acid-base disorders were common findings；④Provided the infection was controlled effectively，corticosteroids seems to have beneficial effects in patients with septic ARDS.

Key words respiratory distress syndrome；diagnosis；treatment

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3 讨论

局限性胫前粘液性水肿被认为是一种自身免疫性病变，常与自身免疫性甲状腺疾病，尤其是Graves'病合并存在，其发生与甲亢病情的轻重无平行关系，约50%发生于甲亢活动期；另50%则于甲亢治愈后。大部分局限性粘液性水肿患者血中TgAb及TmAb为阳性，部分仅TsAb为阳性[1]。我们治疗的10例患者TgAb及TmAb均为阳性，全伴有浸润性突眼，与大多数学者提出的自身免疫机制相符。

鉴于局限性粘液性水肿可能的病因，多数人采用局部注射氢化考的松等办法治疗，疗效肯定，但需反复注射，用量大，易产生付作用，停药后复发率高。利美达松是一种将氟美松棕榈酸酯溶于脂肪乳糜微粒中的新剂型，具有非特异性抗炎、抑制B细胞产生抗体、调整CD4/CD8的细胞比值的作用。近来的药理学研究显示，它能抑制诱导型一氧化氮合酶(Nitric oxide synthase，NOS)的表达[2]。已肯定一氧化氮在自身免疫疾病中具有直接细胞毒，诱导产生自由基、TNF等产生，特别是诱导细胞凋亡，导致自身免疫损伤等重要作用[3]。我们局部和静脉给予利美达松，在炎症区可被巨噬细胞等炎性细胞所吞噬，抑制这类细胞的游走、吞噬及活性氧生成性能，减少抗原抗体复合物产生的影响，减轻水肿，并且作用持久。可全身或局部使用，因每4 mg利美达松内含氟美松2.5 mg，1月使用1～2支，故几乎不产生类固醇类药物常出现的付作用，我们用利美达松局部注射，个别病变严重者同时静脉注射给药，收到满意的疗效，随访1～3年无复发，因此我们认为利美达松局部注射治疗局限性粘液性水肿是一种有效、稳定、简便的方法。

关键词 粘液水肿；利美达松

中图法分类号 R581.22

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