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Changes of mitochondrial function and hepatic and renal ATP level after severe burn injury in dogs

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Abstract Respiratory control rate (RCR), ADT/O ratio and ATP content of the liver and kidneys were determined to evaluate the effects of 50% TBSA third degree burns on the respiratory function of the mitochondria in the liver and kidneys in dogs. It was found that the stage 4 respiratory rate was increased significantly postburn ($P<0.01$). RCR, ADT/O ratio and ATP level were significantly decreased to 43.1%, 70.6% and 40.1% in the liver and 73.4%, 76.2% and 51.4% in the kidneys as compared with those of the normal control ($P>0.01$). Yet in the group of dogs with immediate fluid replecement after burn injury, RCR, ADT/O ratio and ATP level were 96.5%, 95.4% and 98.8% in the liver and 88.7%, 93.5% and 85.0% in the kidneys as compared with those of the normal control ($P>0.05$).

These findings indicate that severe burns can destroy the coupled phosphorylation in the mitochondria and impair their capability to produce ATP. Immediate fluid infusion after burns can protect the mitochondrial function effectively.

Key words severe burns; respiratory control rate; ADT/O ratio; mitochondrial function

误服达美康致低血糖昏迷一例报告

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达美康(Gliclazide)系第二代磺酰脲类口服降血糖药。非糖尿病人误服致低血糖昏迷未见文献报告。现报告我院近期抢救成功一例。

患者 男,84 岁。于 1992 年 2 月 18 日 9、14 和 21 时误服达美康 3 次,每次 3 片,总量 720mg。24 时觉双下肢麻木无力。次晨不能行走。无头痛、呕吐。正常进食。下午进晚餐时,感心慌、手抖、出汗。18 时家人发现患者大汗,四肢及面部肌肉抽搐,持续约 5min,随后意识丧失、呼之不应、鼾声大起,遂送我院。既往无糖尿病、高血压和肝、肾疾病史。无类似发作史。入院查体:BP 25.5/15.5 kPa,呈昏迷状态。呼吸急促,呼出气无酮味。双瞳等大等圆,光反射迟钝。左侧鼻唇沟浅。颈软,双肺满布鼾音。心率 110 次/min、律齐、无杂音。腹部(-)。四肢肌力Ⅱ级以上,肌张力正常。双侧巴氏征(+)、查多克征(+)。因患者有大剂量达美康服用史,即采血查血糖,静注 50% GS 40ml,10% GS 持续静滴,患者意识逐渐恢复,5min 后,能正确回答问题。血糖报告为"0"。ECG 示窦速,轻度心肌缺血改变。证实低血糖昏迷诊断,补糖治疗 3d,监测血糖正常,痊愈出院,短期内随访无后遗症。

讨论

达美康致糖尿病人低血糖昏迷已有文献报告[1]。但致非糖尿病人低血糖昏迷国内外均未见报道。本例患者服用大量达美康(720mg),服药后 33 h 发生昏迷,其原因为达美康在老年人血中半衰期较长(20.5 h)[2],以及老年人器官功能减退,药物代谢减慢,药效叠加。非糖尿病人误服降糖药是低血糖昏迷原因之一[3]。临床上应注意鉴别诊断。发生低血糖昏迷的老年患者,症状和体征多不典型,常发展为重症易误诊为脑血管意外[4]。所以,如有服药史,应立即抢

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Establishment of a mouse model of transplantable mammary spindle cell carcinoma SCC891

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Abstract After screening, the authors established a mouse model of pathomorphologically special, transplantable mammary spindle cell carcinoma SCC 891 in BALB/c mice. After 48 passages in 2.5 years, the growth of the tumor strain became stable with a 100% transplantibility. Its growth was quite active without observable spontaneous regression. The mean life span of the host mouse was 35.2±7.3 days. BALB/c mice of both sexes and of any age were susceptable to the carcinoma, and the carcinoma was sensitive to various anticancer drugs.

Key words breast neoplasms; mice; spindle cell carcinoma; disease models, animal

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救，不必等待血糖报告，而延误时机。清醒后继续补糖数日，防止病情反复。达美康降糖作用机理主要是刺激胰岛细胞释放胰岛素[1]。

关键词 血糖过少；磺酰脲化合物/中毒

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