

论著

术中经颅电刺激运动诱发电位监测评估颅内动脉瘤术后运动功能

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摘要:

目的: 探讨经颅电刺激运动诱发电位(MEP) 监测颅内动脉瘤患者运动功能缺损的应用价值。方法: 69 例颅内动脉瘤夹闭手术患者, 术中行MEP 监测, 比较术前及术后神经功能的改变和MEP 变化之间的关系。结果: 69 例患者中9 例表现出MEP 的异常, 其中6 例术中采取相应措施后, 1~40 min 内MEP 逐渐恢复正常, 术后未出现新发神经功能障碍。手术结束时3 例MEP 未能恢复到基线水平, 与术后神经功能障碍的发生具有一致性。结论: MEP 的改变可较早地获得脑缺血的证据, 预测患者术后肢体功能障碍, 指导载瘤动脉的临时阻断时间。经颅电刺激面神经运动诱发电位(FNMEP) 在巨大及复杂动脉瘤术中是一种安全、有效地监测面神经通路完整性的手段。

关键词: 颅内动脉瘤 术中监测 经颅电刺激运动诱发电位 经颅电刺激面神经运动诱发电位 运动功能

Assessment of intraoperative motor-evoked potentials for predicting postoperative motor function during the surgical clipping of intracranial aneurysms

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Abstract:

Objective: To evaluate the usefulness of monitoring transcranial electrically stimulated motor evoked potential (MEP) and its impact on postoperative motor function after surgical clipping of intracranial aneurysms.

Methods: A total of 69 aneurysm patients were monitored for MEP during surgery. The postoperative and preoperative neurological function variation and the correlation between them were compared.

Results: MEP deteriorated in 9/68 patients, 6 of the deteriorated MEP returned to normal within 1-40 min, and no new motor deficit emerged. 3 of MEP failed to return to the baseline, which were consistent with postoperative motor function deficit.

Conclusion: Changes in MEP could serve as early indication of the cerebral ischemia, predicting postoperative motor function and providing a guide to a safe time for temporary clipping. FNMEP monitoring is a safe and reliable tool for the integrity of facial nerve pathway in giant aneurysm surgery.

Keywords: intracranial aneurysm intraoperative monitoring transcranial motor evoked potentials transcranial facial nerve motor evoked potential motor function

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