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CLINICAL INFORMATION

Postoperative visual loss due to conversion disorder after spine surgery: a case report

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Abstract
Background and objective: Patients undergoing spinal surgeries may develop postoperative visual loss. We present a case of total bilateral visual loss in a patient who, despite having clinical and surgical risk factors for organic lesion, evolved with visual disturbance due to conversion disorder.
Case report: A male patient, 39 years old, 71 kg, 1.72 m, ASA I, admitted to undergo fusion and discectomy at L4–L5 and L5–S1. Venoclysis, cardioscopy, oximetry, NIBP; induction with remifentanil, propofol and rocuronium; intubation with ETT (8.0 mm) followed by capnography and urinary catheterization for diuresis. Maintenance with full target-controlled intravenous anesthesia. During fixation and laminectomy, the patient developed severe bleeding and hypovolemic shock. After 30 min, hemostasis and hemodynamic stability was achieved with infusion of norepinephrine, volume expansion, and blood products. In the ICU, the patient developed mental confusion, weakness in the limbs, and bilateral visual loss. It was not possible to identify clinical, laboratory or image findings of organic lesion. He evolved with episodes of anxiety, emotional lability, and language impairment; the hypothesis of conversion syndrome with visual component was raised after psychiatric evaluation. The patient had complete resolution of symptoms after visual education and introduction of low doses of antipsychotic, antidepressant, and benzodiazepine. Other symptoms also regressed, and the patient was discharged 12 days after surgery. After 60 days, the patient had no more symptoms.

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Conclusions: Conversion disorders may have different signs and symptoms of non-organic origin, including visual component. It is noteworthy that the occurrence of this type of visual dysfunction in the postoperative period of spinal surgery is a rare event and should be remembered as a differential diagnosis.

PALAVRAS-CHAVE
Anestesia geral;
Cegueira;
Transtorno conversivo;
Laminectomia;
Decúbito ventral

Perda visual conversiva em pós-operatório de cirurgia de coluna: relato de caso

Resumo
Justificativa e objetivo: Pacientes submetidos a procedimentos cirúrgicos espinhais podem evoluir com perda visual pós-operatória. Apresentamos quadro de perda visual bilateral total em paciente que, apesar de apresentar fatores de risco clínicos e cirúrgicos para lesão orgânica, evoluiu com distúrbio visual conversivo.
Relato de caso: Masculino, 39 anos; 71 kg; 1,72 m; ASA I, admitido para realização de artrodese e discectomia em L4-L5 e L5-S1. Venóclise, cardioscopia, oximetria, PANI; indução com remifentanil, propofol e rocurônio; intubação com TOT 8,0 mm seguida por capnografia e diurese por sondagem vesical. Manutenção em anestesia venosa total alvo-controlada. Durante fixação e laminectomia, evoluiu com importante sangramento e choque hipovolêmico. Após 30 minutos obteve-se hemostasia e estabilidade hemodinâmica com infusão de noradrenalina, expansão volêmica e hemoderivados. Na UTI, evoluiu com confusão mental, fraqueza em membros e perda visual bilateral. Não foi possível identificar achados clínicos, laboratoriais ou de imagem para lesão orgânica. Evoluiu com episódios de ansiedade, labilidade emocional e distúrbio de linguagem; foi aventada hipótese de síndrome conversiva com componente visual após avaliação psiquiátrica. Apresentou melhoria total de sintomas visuais após educação e introdução de baixas doses de antipsicótico, antidepressivo e benzodiazepínico. Houve regressão dos demais sintomas com alta no décimo segundo dia pós-operatório. Encontrava-se assintomático após 60 dias.
Conclusões: Distúrbios conversivos podem apresentar diversos sinais e sintomas de origem não orgânica, incluindo componente visual. Destaca-se que a ocorrência desse tipo de disfunção visual no pós-operatório de cirurgias espinhais é evento raro e deve ser lembrado como diagnóstico diferencial.

Introduction

Patients undergoing spinal surgery may rarely experience postoperative visual loss.[1] The etiological factors related to these lesions have been described mostly as organic, with objective identification of injury through clinical examination and imaging tests.[2–6]

However, there are situations in which the identification of an organic cause for the visual loss is not possible.[7] In these situations, the deficit is described as being ''functional''. This term is intended to combine the following conditions: conversion disorder (somatoform), factitious and simulation disorder.[7,8] Compared with factitious and simulation disorders, the conversion disorder symptoms are unintentional. However, often this distinction is difficult, requiring the experienced psychiatric staff expertise.

This report aims to draw attention to the inclusion of visual loss from conversion disorder as rare differential diagnosis in cases of postoperative visual loss. In such cases, the presence of a high level of suspicion in addition to neuro-ophthalmological examination able to exclude the presence of positive signs for organ damage is critical for early diagnosis and treatment.

Case report

Male patient, 39 years, 71 kg, 1.72 m, presenting with history of radiculopathy and persistent motor deficit in the left lower limb, was admitted for fusion and discectomy at both levels L4–L5 and L5–S1.

In the pre-anesthetic evaluation, he had no comorbidities, allergies or previous surgeries. The patient denied continued use of medication, and laboratory tests were normal. Magnetic resonance imaging (MRI) showed extrusive foraminal herniation to the left at L4–L5 and L5–S1.

After venous puncture with extracath 16G and monitoring with cardioscope (DII and V5), pulse oximetry, neuromuscular blocking monitor, and noninvasive pressure, induction of anesthesia was performed with remifentanil (0.5 mcg kg^{-1} min^{-1}), lidocaine 2% without vasoconstrictor (2 mL), propofol (4 mcg mL^{-1}), and rocuronium (50 mg). Endotracheal intubation by direct laryngoscopy with 8.0 mm

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