Case Reports
Isolated accessory nerve palsy of unusual cause

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We report the case of a 23 year old male patient who presented for an isolated left accessory nerve palsy which had appeared one year before. Neuroradiological investigations showed that the causative pathology was a giant saccular aneurism of the intracranial left vertebral artery. Three months after diagnosis, signs of bulbar palsy rapidly developed. An emergency intra-arterial embolization was then attempted, which led to complete recovery except for the accessory nerve palsy which remained unchanged. We conclude that, in cases of apparently isolated accessory nerve palsy, neuroradiological investigations should include the posterior fossa.

Key words: accessory nerve — vertebral artery — giant aneurism — cerebrovascular diseases.

Introduction

Isolated accessory nerve palsy is usually due to lesions of the nerve in the neck [1, 2]. The present represents the first reported case of accessory nerve palsy produced by a large intracranial lesion.

Case report

A 23 year old Caucasian male was referred for consultation to the Clinica Neurologica of the University of Brescia because of the presence of a deficit in left shoulder elevation, which had first appeared approximately one year earlier and had since been slowly progressing. At admission, neurological examination confirmed the deficit of elevation and revealed that it was due to weakness of the left trapezius muscle, the upper and middle portion of which appeared markedly atrophic. Cutaneous sensitivity was unaffected, and the results of the other neurological examinations were negative. EMG showed signs of denervation limited to the upper and middle portion of the left trapezius muscle. A CT scan without contrast medium disclosed a space-occupying lesion in the posterior fossa (Fig. 1). Subsequent MRI confirmed the presence of the lesion, showing that it compressed and displaced the brainstem and cervical cord, stretching it upwards towards the bulbo-medullary junction (Fig. 2). Transfemoral angiography showed a partially thrombosed giant saccular aneurism (5 cm in diameter) of the left intracranial vertebral artery extending into the proximal basilar artery (Fig. 3). The right vertebral artery apparently terminated in a "cul de sac". The contrast medium only arrived at the basilar artery (which was shown to be ectasic) through the left vertebral artery. With the reciprocal agreement of the patient and the neurosurgeon, it was decided to avoid surgery because of the exceedingly high operative risk. However, three months later, the patient developed flaccid tetraparesis, with multiple bulbar nerve palsy and respiratory insufficiency. He then underwent an emergency procedure involving the intra-arterial embolization of the left vertebral artery by means of an in-