Abstract

Most meningiomas of the spinal cord are benign and arise from arachnoid membrane. We are reporting synchronous two meningiomas, one at T_{10-11} and another at L_{1} level in the same patient.

Introduction

The majority of primary spinal tumours are benign and an early diagnosis and treatment is associated with a good neuro-surgical outcome. We present a rare case of synchronous meningiomas that underwent surgery.

Case History

Mr. M, a 40-year-old man came from Debigonj, Ponchagar and was admitted on 17 April 2005. He was admitted with the complaints of low back pain for one year, severe form of weakness in both lower extremities below T_{10} segment for 2 months, and retention of urine for 9 days. Temperature was raised for 5 days but there was no history of trauma. On examination, he was alert, oriented. Straight leg raising test revealed grossly restricted movement on both sides and extensor hallucis longus muscle power was very weak on both sides. Motor and sensory functions in both lower limbs were impaired below T_{11} segment. Perianal sensation was absent. Reflexes were absent. Bowel and bladder functions were impaired. Other system examination revealed no abnormality.

Routine blood examination, blood biochemistry, chest skiagram and electrocardiogram showed no abnormality. Myelography of the full spine showed well-outlined filling defects at L_{1} level (subdural but extra medullary) and there were complete obstruction to flow contrast dye at T_{11} level, which was subdural and extra medullary type with crescentic outline (Fig-1). MRI of the spine was not done.

Fig-1 Synchronous spinal tumours.
Treatment

Operation was done on 10 April 2005 under general anaesthesia; posterior thoraco-lumbar (long) midline incision was made. After dissection, lamminectomy was done from T10 to L2 level. Then dura was opened. The large tumour at thoracic region, about 5cm × 3.5cm was removed with internal decompression. The tumour was present at right antero-lateral aspect of the spinal cord. Other tumour was searched and it was found at L1 level. It was about 2.5 cm × 2cm (almost rounded) and was removed meticulously with proper haemostasis. Both tumours were totally excised off. Histopathology report of both the tumours showed fibroblastic meningioma. No malignant changes were detected.

Postoperative follow-up

Before discharge, the patient was able to move actively right lower extremity but the left lower extremity could be moved with support. He was advised to come after 3 months for follow-up.

Patient was able to feel the urinary urge during bladder trial post operatively. He was advised for physical exercise to improve the motor functions. The sensory functions regained fully on 5th postoperative day.

Discussion

Thoracic meningiomas occurred predominantly in the lower thoracic spines out of 14 spinal meningiomas while two other patients had concurrent spinal and intracranial meningiomas. The deletion of 22q 13 loci or while loss 22 chromosome is frequently reported abnormalities of meningiomas. Multiplicity of tumours may derived from same clone of cells, and suggest the theory of development of multiple meningiomas from spreading of tumour cells.

All most all cases of familial meningiomas occur in association with NF2. Fibroblastic intraspinal extramedullry meningioma is rare entity.

Multiple spinal tumours with peripheral nerves are often seen with neurofibromatosis type I & II.

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References


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