Sir,

Metastatic tumors account for less than 1% of intramedullary spinal cord tumors and more common in the cervical segment followed by lumbar and thoracic segments. The involvement of the conus medullaris is extremely rare and literature review reported only five cases till date. [1], [2], [3], [4]

A 51-year-old male who had undergone left pulmonary lobectomy for squamous cell carcinoma followed by adjuvant radiotherapy and chemotherapy 3 months earlier was admitted for subacute onset of left lower limb paresthesias; proximal muscle weakness (2/5) in the left lower limb and distal muscle weakness in the right lower limb (2/5); urinary retention and constipation. Magnetic resonance imaging (MRI) of the spine demonstrated an intramedullary lesion in the conus medullaris, which was lateralized to the left and showed ring enhancement after contrast administration [Figure 1]. Image studies confirmed a solitary lesion as well as the primary disease to be under control. In view of these two factors, the patient was considered for surgical resection of the lesion with intraoperative neurophysiological monitoring. The patient underwent a T10-L1 laminectomy and a gross total resection of the tumor could be achieved. Pathological findings confirmed the diagnosis of intramedullary metastasis of squamous cell carcinoma. The patient showed improvement of muscle weakness (4/5 in both lower limbs) as well as sphincter control when he was discharged home. {Figure 1}

Nearly 40% of cancer patients show symptoms of spinal involvement due to metastatic disease. One in five of them develop spinal cord compression secondary to bone metastases. The most frequently affected segment is the thoracic; because of its greater number of vertebrae [5] Intramedullary
location is an uncommon site for metastases and the most frequently affected segment is the cervical. The most common primary tumor is the oat cell lung carcinoma (64%), followed by breast adenocarcinoma (11%) and melanoma (5%). Breast cancer is the most common cause in women. [1],[2],[3] Till date only five cases of metastatic lung cancer to the conus medullaris have been published and ours is the sixth case [Table 1].

Clinical presentation of intramedullary metastases depends on the exact location of the lesion and varies depending on the level. The presentation can be acute and may be complete or incomplete cord syndrome. [1],[2],[3],[4] Unlike vertebral bone metastases, where a management protocol (stabilization, decompression and radiation therapy) has been clearly defined, intramedullary metastasis management remains controversial. In this situation, survival depends on the primary disease control as well as the stage in which the diagnosis is established. Surgery may not be considered in cases of patients presenting with advanced stages of the disease. [2] However, when primary disease is under control and the patient shows a solitary symptomatic metastasis, surgical removal of the lesion should be the treatment of choice followed by subsequent adjuvant therapy, as has been done in this patient.

The impact on survival of surgical removal of intramedullary metastases has not been well documented. Moreover, the largest meta-analyses on this subject till date only refer to patients suffering from vertebral metastases. In such situations, surgical treatment followed by radiation therapy is associated with increased life expectancy. However, average life expectancy is 6-8 months when primary disease extension is not under control. [4],[5] Besides that, and despite the fact that short to medium-term functional outcome has not been well established to date, the function of the patient is believed, at least, to remain stable and not to deteriorate once the cause of the compression has been removed.

References