Case	(157) Intramedulary metastases as first manifestation of lung cancer.
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CASE PRESENTATION

58 year-old male with no personal history of interest attended the emergency department due to progressive loss of strength in both lower limbs after six days of evolution. On examination, the patient had 2/5 weakness in both lower limbs, bilateral Babinski and inability to stand autonomously. Given the suspicion of acute spinal cord compression, urgent spinal MRI was requested.

MRI evidenced of metastatic involvement of the vertebral body D3 and pedicle. After intravenous gadolinium administration, the main finding is the existence of a intramedullary hypercaptant lesion, accompanied by cranial and caudal edema to said lesion. In addition, by reviewing the simple radiography performed in the emergency department, a lung mass image is detected.

Therefore, the findings are compatible with medullary and vertebral metastasis in relation to undiagnosed pulmonary neoplasia, which was later confirmed.

DISCUSSION

Although the vertebrae and the extradural space are frequently the site of malignant metastatic disease, intramedullary spinal cord metastasis (ISCM) is relatively rare.

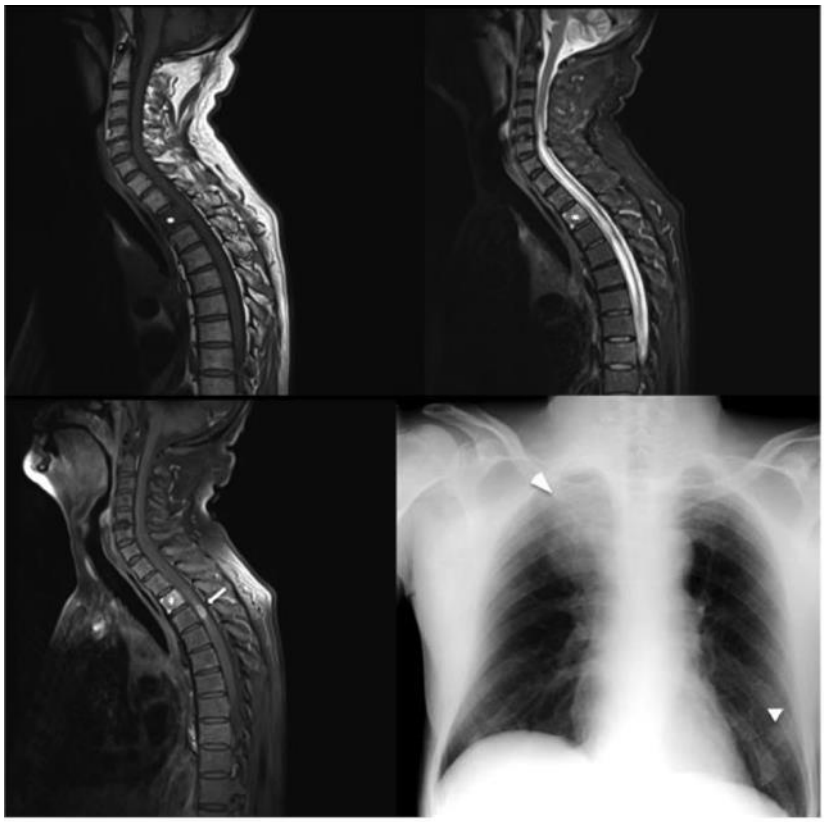
More than 40 % of the reported intramedullary metastasis originate from the lung and less frequently from the breast or kidney. However, ISCMs are being increasingly diagnosed, related to advanced imaging and therapies that prolong survival in patients with cancer.

The clinical presentation is very varied, thus prompt and accurate diagnosis of ISCM is necessary for effective treatment, and MR imaging is the preferred imaging technique.

Several relevant clinical and MR imaging features pertinent imaging features have been described by Rykken JB et al retrospective research study2: almost all ISCMs enhance, the associated spinal cord T2 hyperintensity is extensive, and both intratumoral hemorrhage and intra-/peritumoral cystic/necrotic change are rare.

CONCLUSION

Intramedullary metastases are a rare entity that worsens the prognosis. MR imaging is the preferred imaging technique. Therefore, knowledge of relevant clinical and imaging features of ISCM is important for radiologists and the referring clinicians.



A: Sagittal T1 weighted image. Hypointensity of the vertebral body D3 in T1-weighted sequence, suggestive of bone marrow infiltration. B: Sagittal T2 weighted image. Hyperintensity of the vertebral body D3 in T2 weighted sequence, suggestive of bone marrow infiltration. Moreover, an extensive hyperintensity in the spinal cord extending across several segments is also observed. C: Sagittal Gadolinium-enhanced T1-weighted. After the administration of intravenous gadolinium, the main finding is the existence of a rounded hyper-capturing intramedullary lesion in the sagittal axis, which is accompanied by cranial and caudal medullary edema to said lesion. The vertebral lesion described also enhances. D: chest radiograph. A rounded mass adjacent to the right paratracheal line is shown. There is at least one rounded lesion on the left lung base.

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