Paraspinal extraskeletal Ewing’s sarcoma: a rare clinical entity

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DESCRIPTION
A 10-year-old boy presented with a 6-month history of pain in the back (thoracic region), followed by progressive sensory and motor paraparesis with urinary incontinence.

MRI of the dorsal spine revealed a well-defined collection in the prevertebral and paravertebral regions extending from D6 vertebral body to D11–D12 intervertebral disc level (figure 1). The mass was hypointense on T1-weighted image, hyperintense on T2-weighted image and showed heterogeneous contrast enhancement. The mass also displaced the thoracic aorta laterally (figure 2).

The histological findings were suggestive of small-round-cell malignancy, most probably Ewing’s sarcoma. The extraskeletal Ewing’s sarcoma, being a rare entity, differs from the skeletal form in several respects. The average age of presentation is 20 years while that of the skeletal form is 10 years. The extraskeletal Ewing’s sarcoma is present equally in men and women whereas the skeletal form has a male predilection. Extraskeletal Ewing’s sarcoma has predilection for the soft tissues of the trunk like paravertebral and intercostal regions. The paravertebral location is described in 12–31% of cases. In our patient the tumour was located in the prevertebral and paravertebral regions. The tumour tends to spread locally, infiltrating deep fascial spaces and invading adjacent structures. In our case it invaded the nerve foramina and displaced the thoracic aorta laterally.

Learning points

- Paraspinal extraskeletal Ewing’s sarcoma though being a rare entity should be kept in the differential of prevertebral and paravertebral mass especially in children and young adults.
- With good surgical excision and chemoradiotherapy a fair prognosis can be expected.
- The preservation of the intervertebral disc architecture and lack of destruction of the vertebra are the imaging points in favour of a paraspinal Ewing’s sarcoma as compared to a paraspinal tubercular abscess.

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REFERENCES