

An unusual Location of Primary Extradural Meningioma

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Fig. 1: T1 weighted MRI

A 56 year old lady was evaluated for swelling over right shoulder of 8 months duration. MRI showed a well lobulated T2W isointense mass with central hyperintensity, T1W isointense with central hypointense expansile osteolytic lesion with soft tissue component of size 6.8 x 6.3 x 5.5 cm involving spine of scapula with associated thinning of spine and focal areas of discontinuity.

Patient underwent resection of the mass. Post op HPE was consistent with meningioma, IHC- EMA, bcl2, CD56, TLE 1, synaptophysin positive and cytokeratin, PgR, Desmin, SMA, Caiponin, S-100 protein, CD34, CD23, CD21, MIC 2 and chromogranin A negative.

Meningiomas are divided primarily into intradural and extradural types and account for approximately 20% of all primary intracranial neoplasm. Most



Fig. 2: T2 weighted MRI

common locations include cerebral convexity, skull base. The reported incidence of EDM varies from 2% - 4% in various studies.² They are reported to arise from various sites such as scalp, orbit, paranasal sinuses, nasopharynx, neck, skin, mediastinum, lung, adrenal gland and paraspinal region. Primary extradural meningiomas are more common in females (F: M :: 2:1.2) and have a bimodal age distribution with the first peak in 2nd decade and second peak in the 5th-7th decade¹.

Extradural meningiomas are classified into 3 types¹:

- Type 1: extracalvarial
- Type 2: purely calvarial
- Type 3: calvarial with extracalvarial

extension.

Type 2, Type 3 is further subdivided on the basis of location: - (a) convexity (b) Skull base

On MRI meningiomas typically appear as lobular extra axial masses with well circumscribed margins and are isointense to slightly hypointense on T1W sequence and isointense to slightly hyperintense on T2W sequence. They demonstrate avid and homogenous enhancement.²

On IHC, meningioma is EMA positive in 50-100% of cases. It is also positive for ER/PR/AR.

The management of extradural meningiomas depends on the WHO grade. Grade I meningiomas are managed by surgical excision only, while grade II and grade III meningiomas require adjuvant therapy in the form of radiotherapy or stereotactic radiosurgery. This is also used for the treatment of surgically inaccessible, recurrent or anaplastic meningiomas.

References

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