Case of the week 19.08.2023

LOW-GRADE CHONDROSARCOMA MIMICKING CHONDROID CHORDOMA

Clinical history– A 39year old female came with complaints of double vision, headache, squint, and tingling sensation on the right side of face for one year.

MRI - showed a 3.5x2.8cm large enhancing left cavernous sinus lesion with extension to superior orbital fissure and encasing optic nerve.

Clinical diagnosis – CP angle tumor

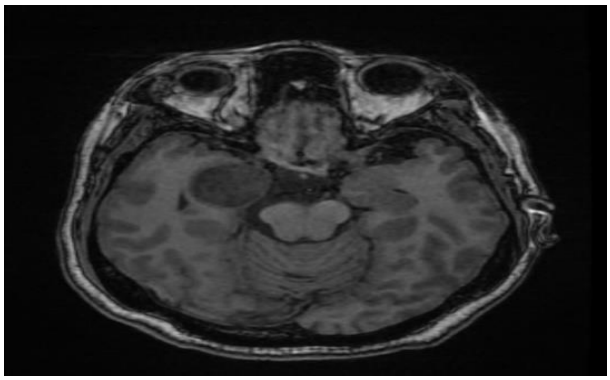

Figure 1: MRI brain showing 3.5X2.8cm large enhancing cavernous sinus lesion extending to superior orbital fissure and encasing optic nerve

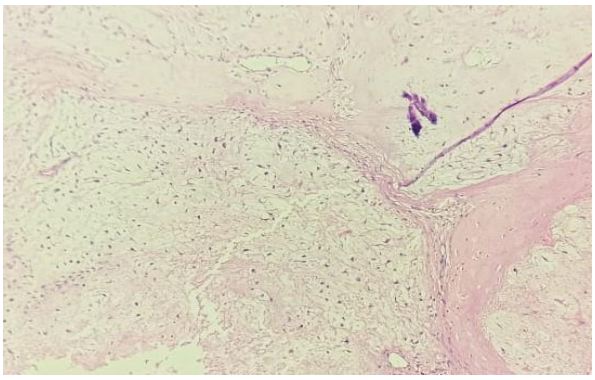

Figure 2: Microscopy shows tumors cells arranged in lobules and nests separated by fibrous septa (X100; H&E)

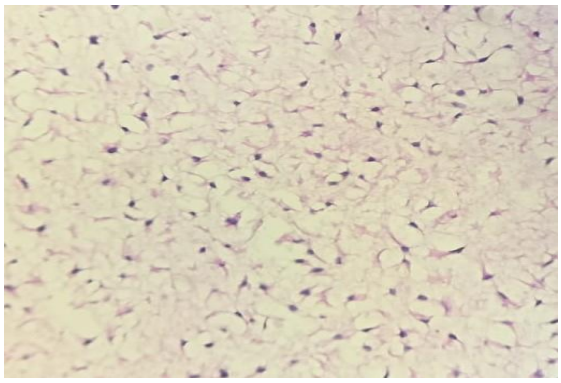

Figure 3: Microscopy shows tumor cells arranged in myxoid matrix (X400; H&E)

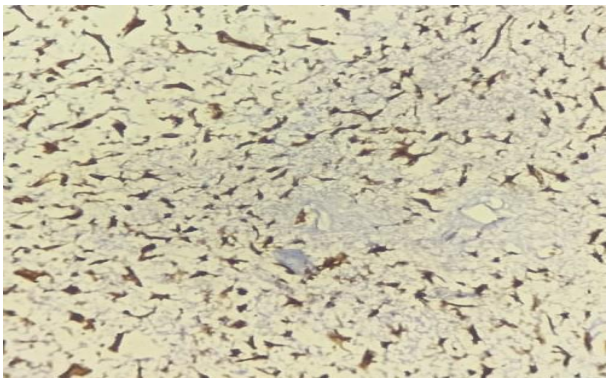

Figure 4: Microscopy shows tumors cells positive for S100 immunohistochemistry (X100; H&E)

Gross – we received multiple grey-white soft tissue bits measuring 5x5cm

Microscopy – Microscopy shows tumor tissue arranged in a lobular and nesting pattern, separated by fibrous strands, tumor cells having round to oval nuclei with abundant clear cytoplasm, with some of them showing vacuolated appearance and separated by myxoid matrix. At some foci, the matrix shows hyaline cartilage with areas of calcification. Immunohistochemistry results showed tumor cells positive for S-100 and negative for EMA.

Impression – Lowgrade chondrosarcoma

Discussion :. Skull base tumors are very rare and aggressive tumors, where surgical management of the patient is very difficult. Appropriate radiological investigations and histopathological examination are very important to provide any adjuvant therapy to the patient. Use of basic immunohistochemistry markers like S100 and EMA aids in the final diagnosis whenever there is a diagnostic dilemma between Chondrosarcoma and Chordoma.