Case history 3:

- A 35-year-old male presented with gradually progressive painless bony swelling in the right frontal region for the last 4 years.

- No history of any neurological symptoms.

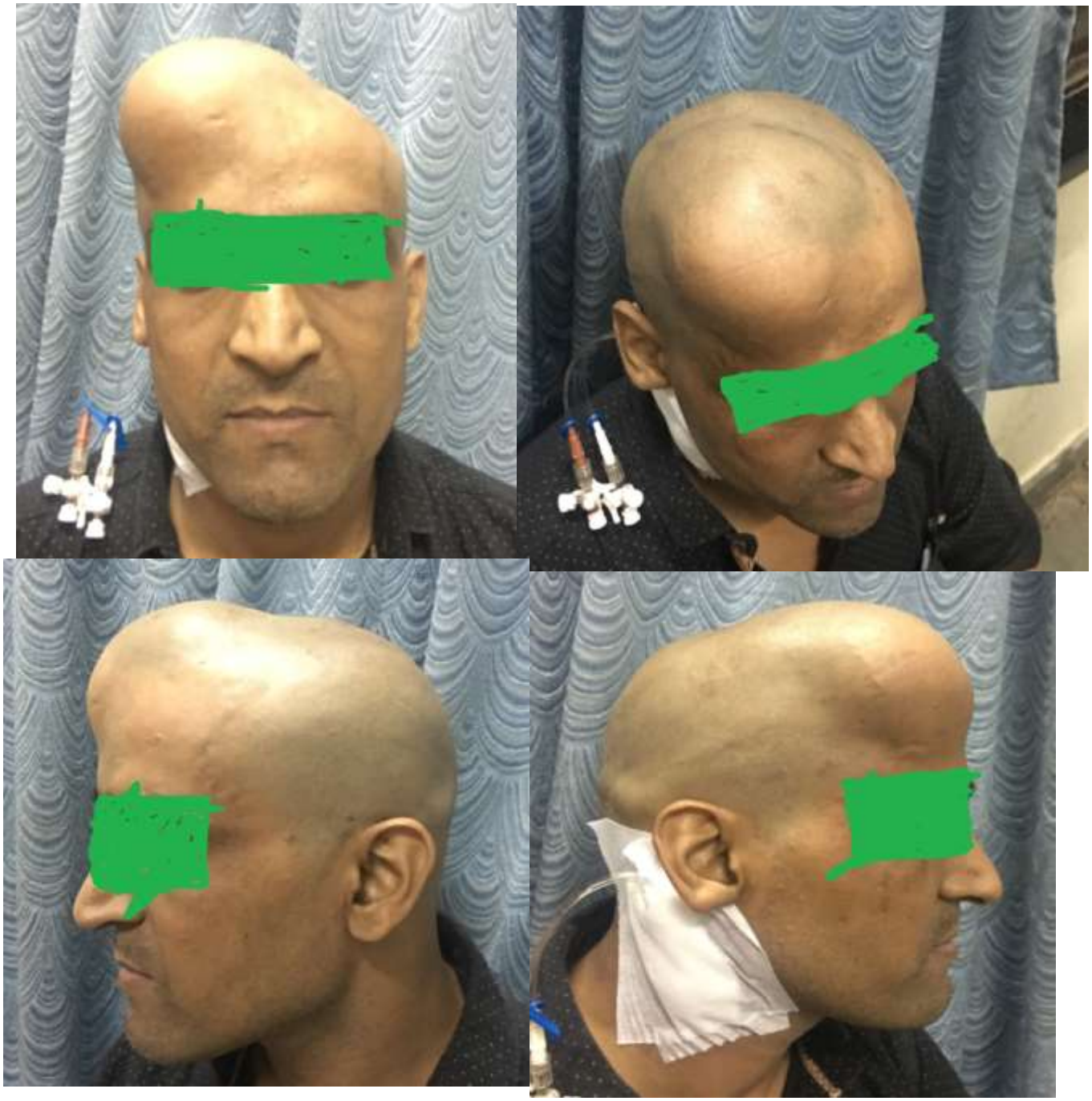
- There was no history of trauma or fever.

Clinical Examination

- There was a large swelling over the right frontal region, immobile, which was bony hard in consistency.

- There was evidence of dilated tortuous vessels in the scalp over and around the swelling.

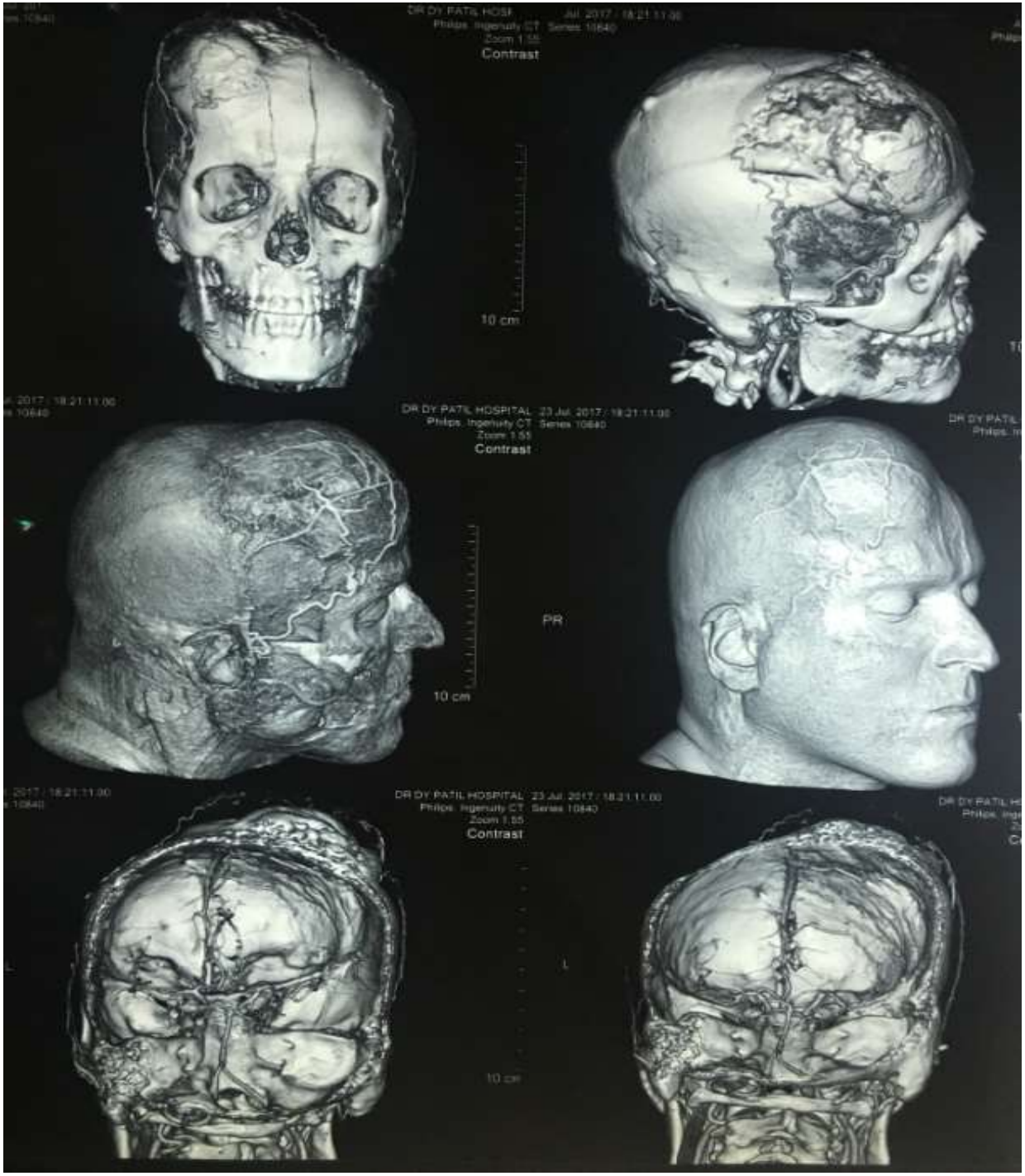
- The swelling was non-tender and the overlying skin could be pinched off the swelling.



Ct scan imaging

- An expansile osteoblastic /sclerotic lesion with lobulated outline measuring approx 92x82x28mm is noted involving right frontoparietal bone with obliteration of diploic space and diffuse enhancing overlying extracranial soft tissue component .

- Calcified bony cavernous hemangioma/ introsseous meningioma /fibrous dysplasia/pagets disease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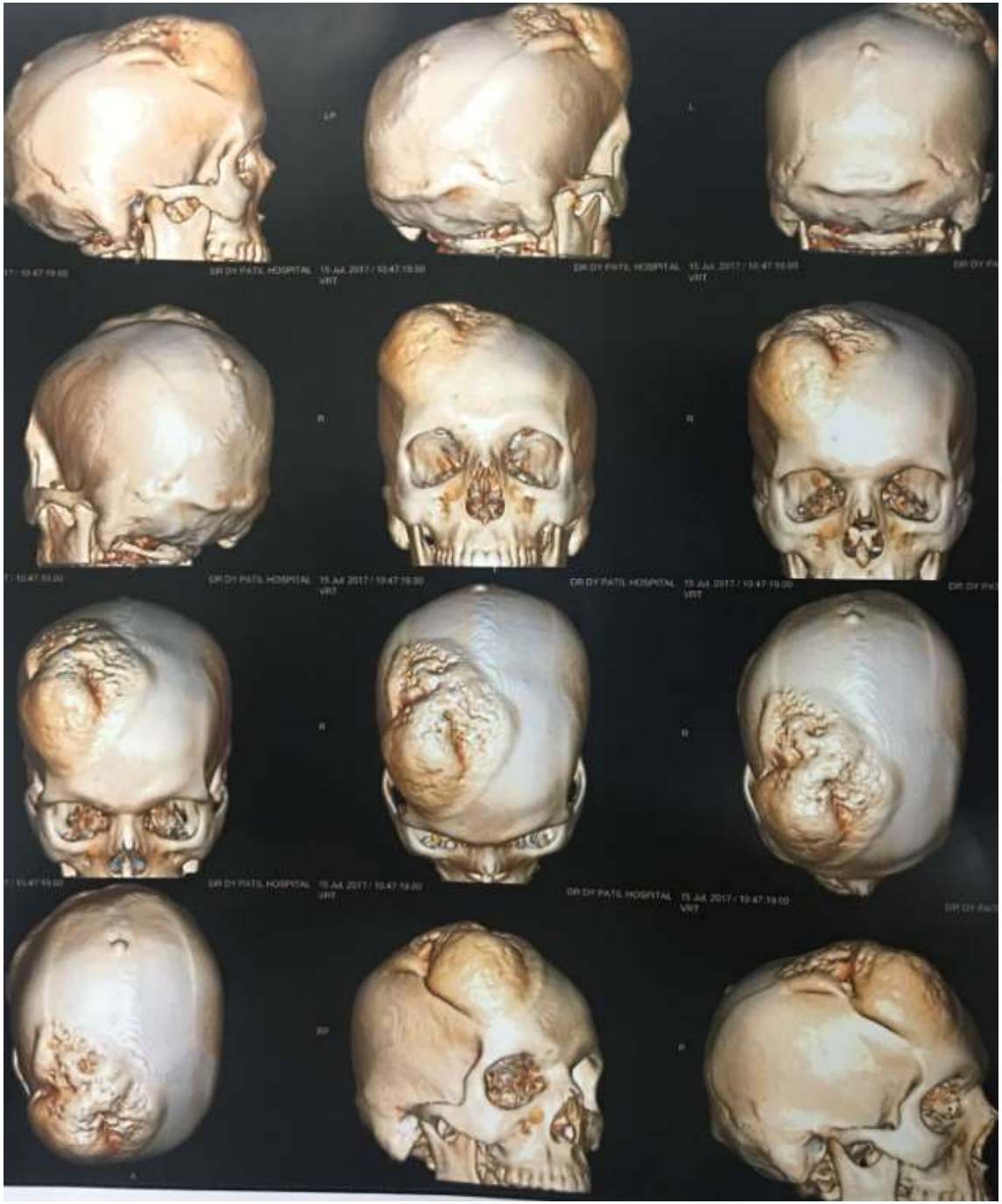
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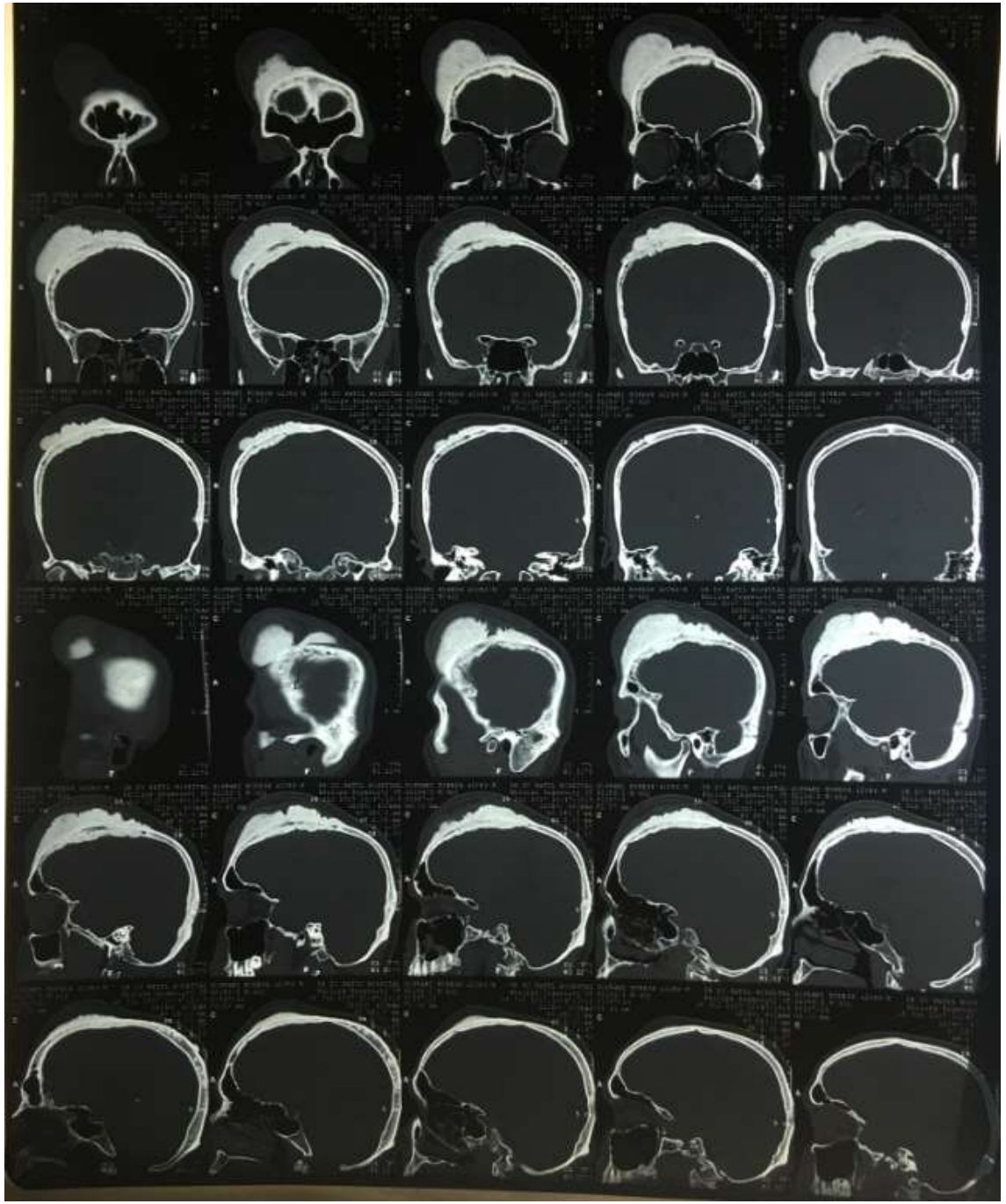
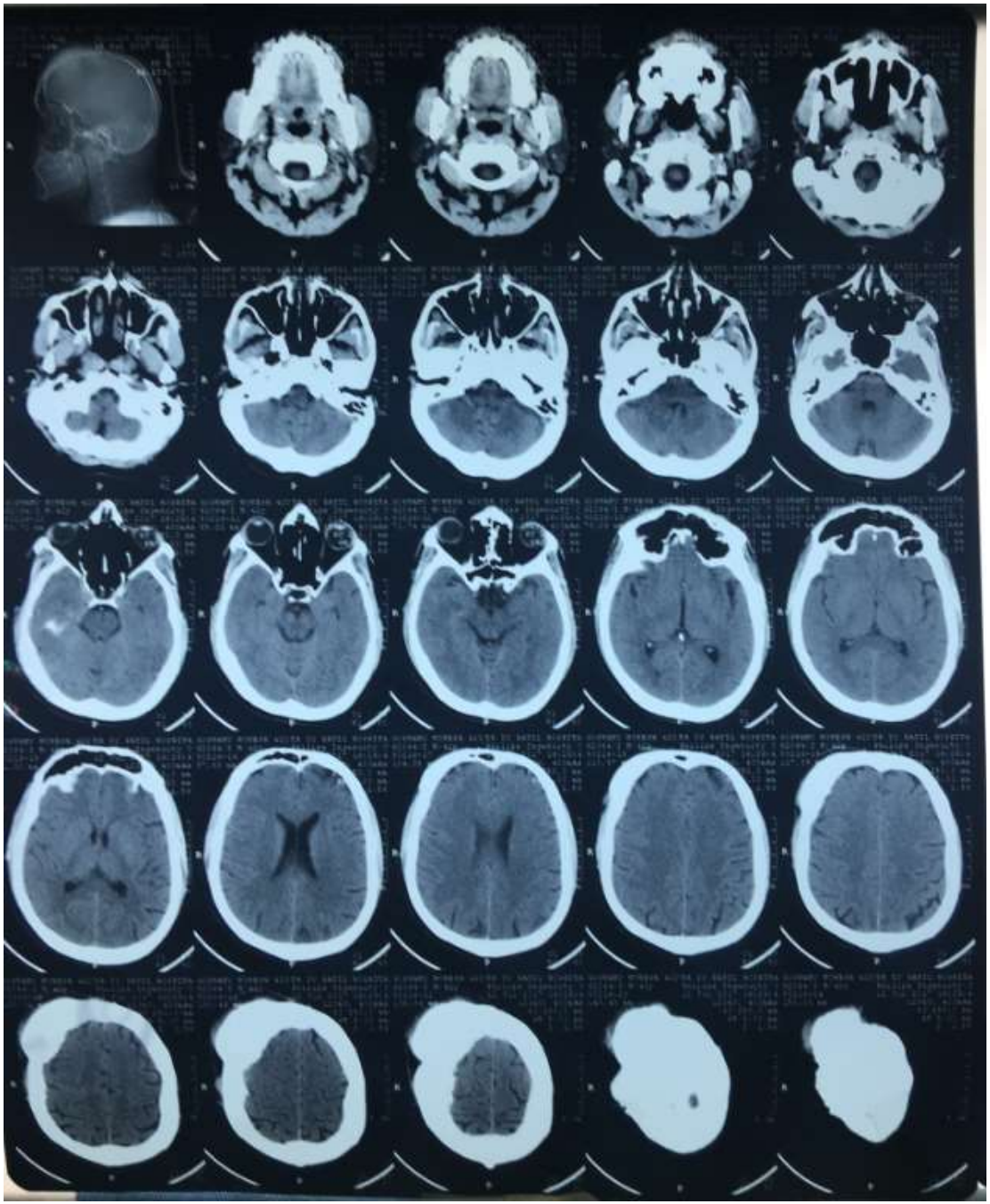




INTRA OPERATIVE

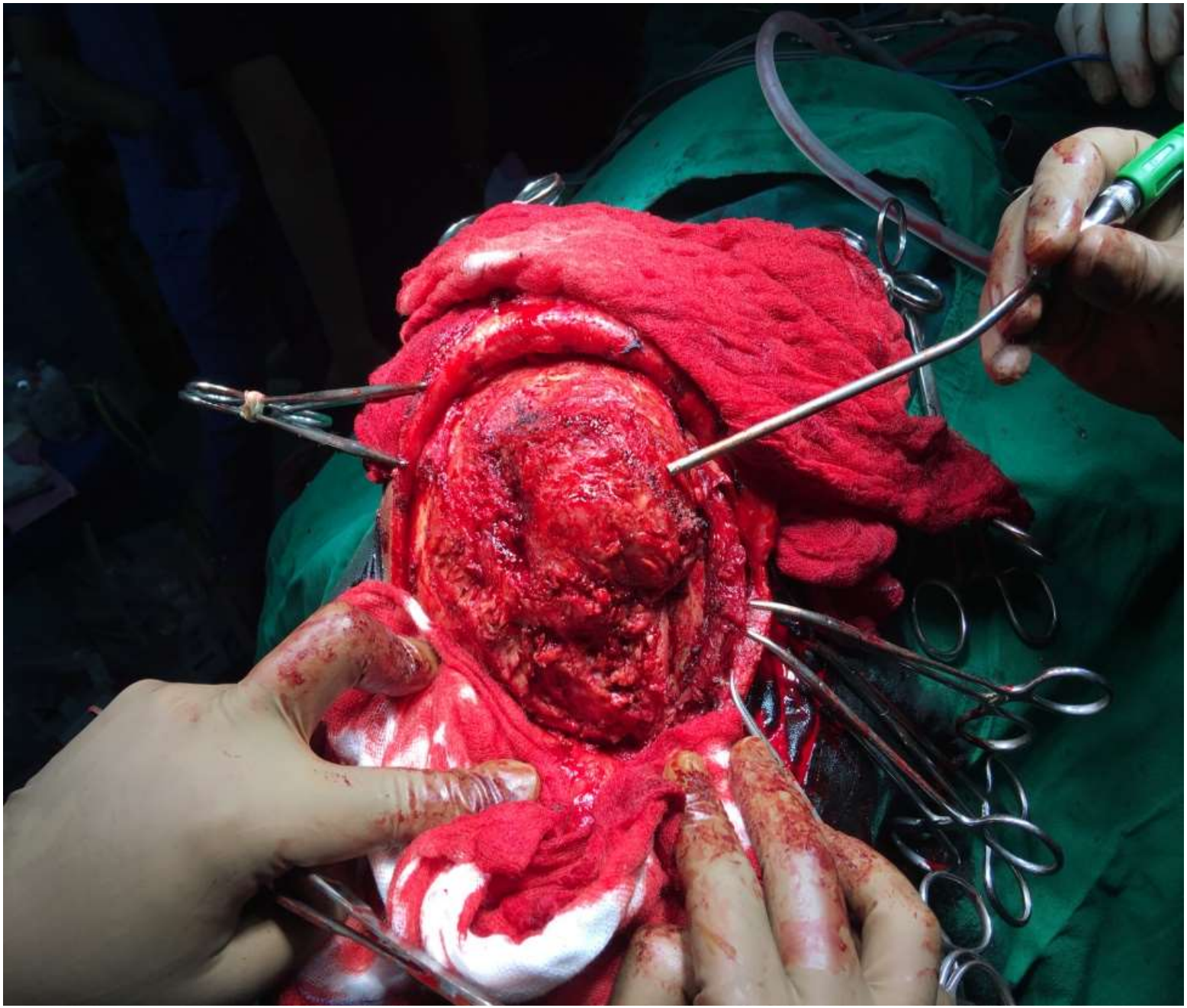
- Occlusive ligatures were taken around the b/I superior temporal and supra orbital arteries.

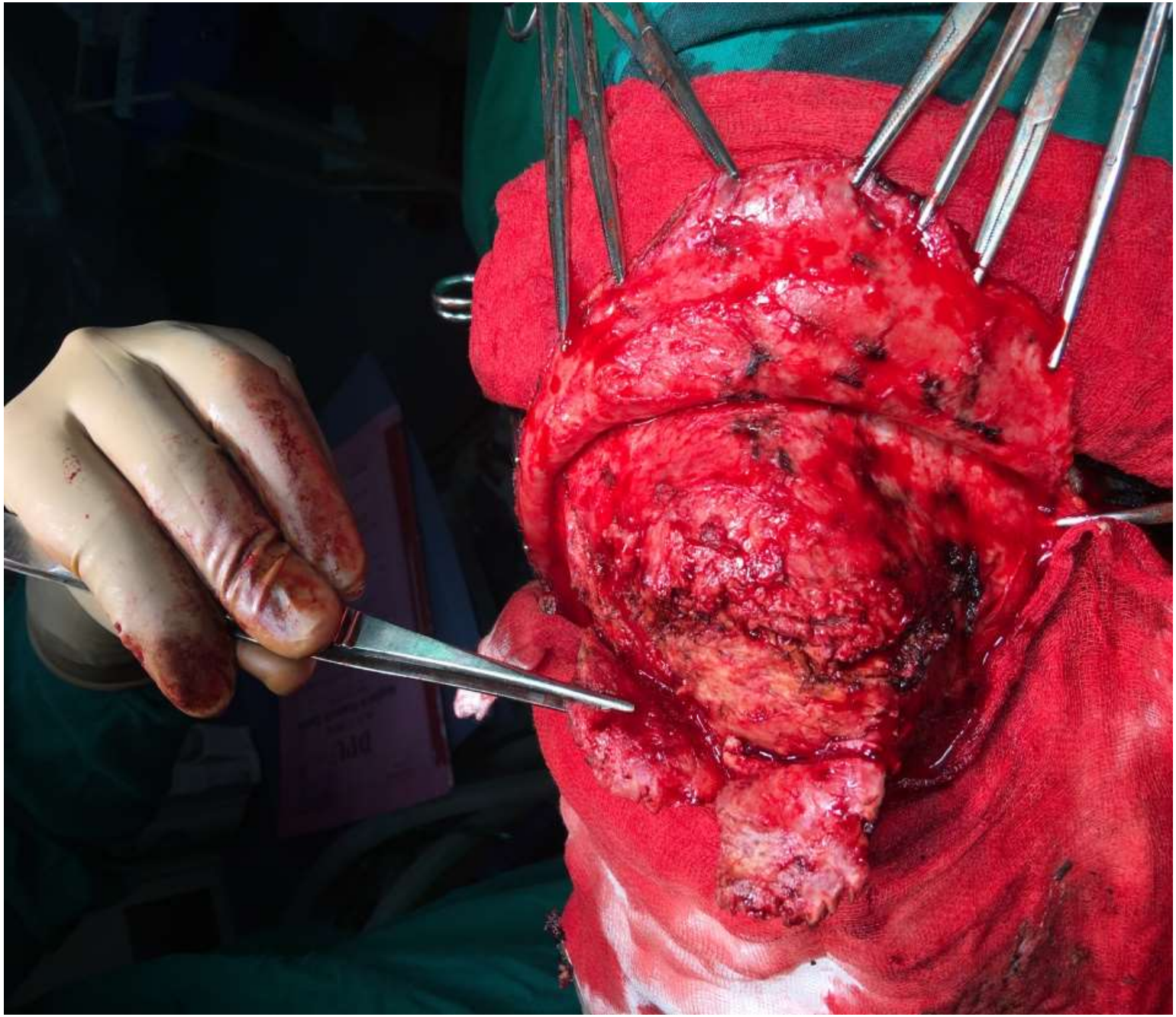
- Skin incision was taken over the tumor which was almost like a bi coronal incision .

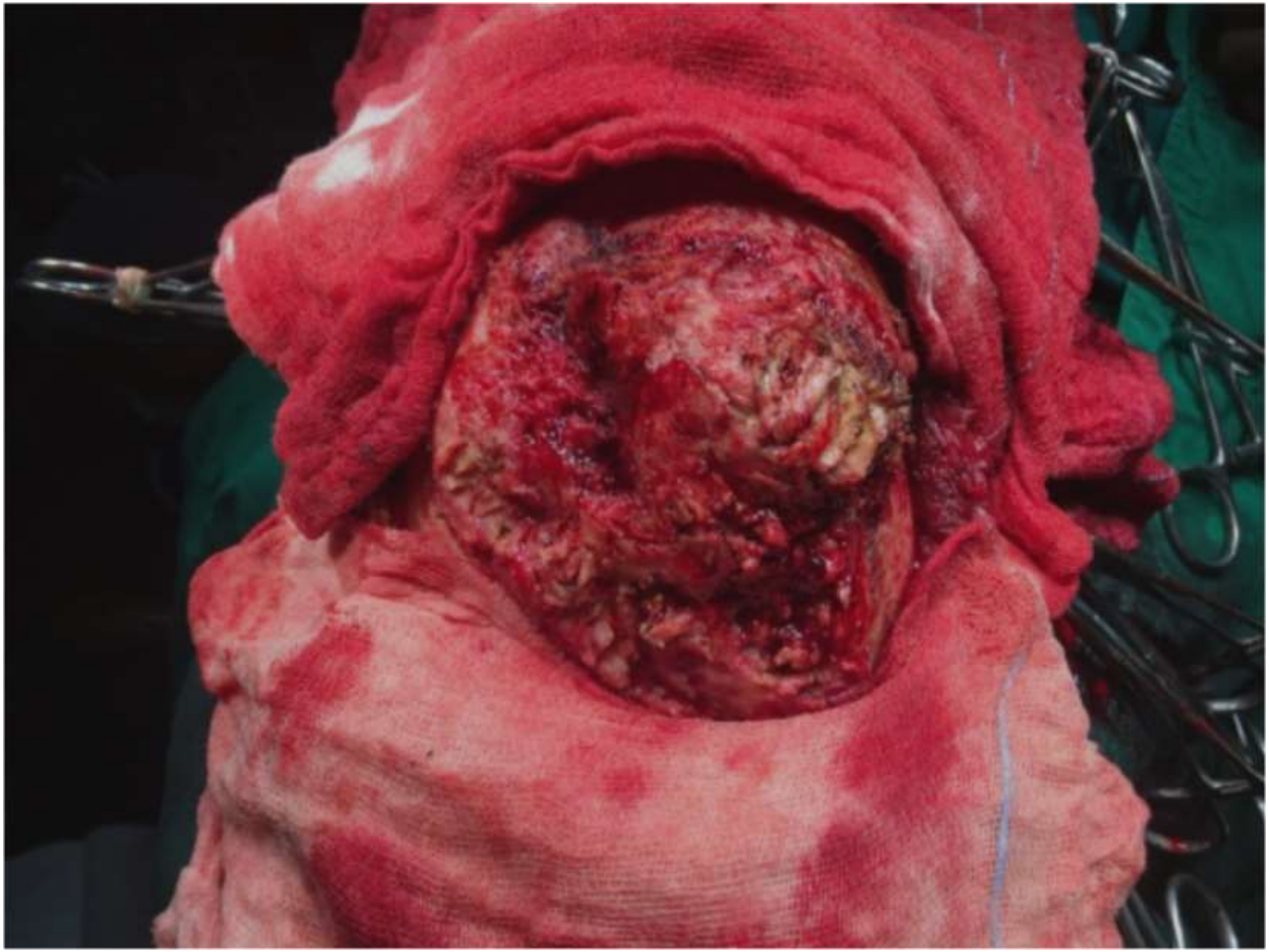
- Flap reflected .

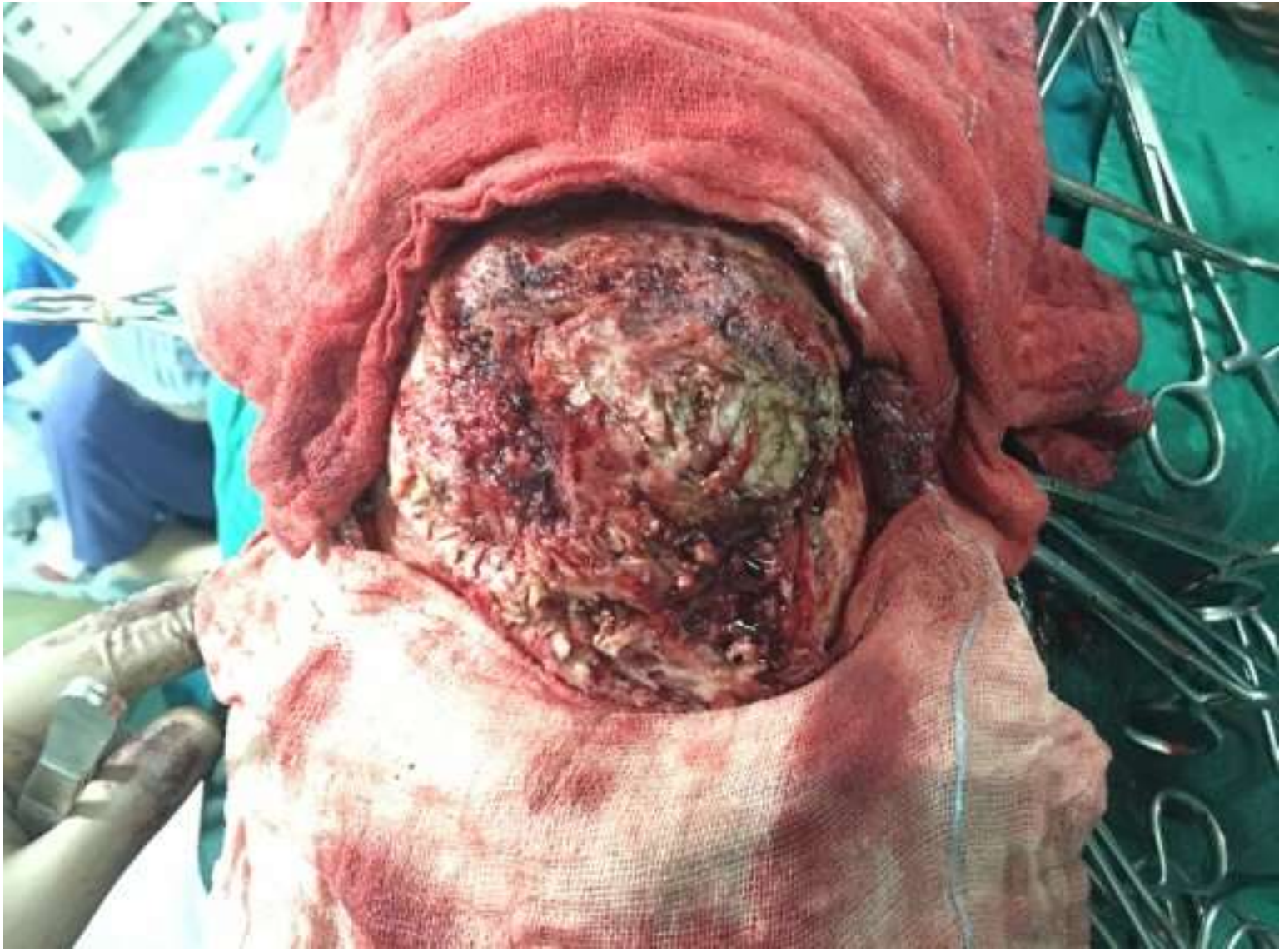
- Evidence of firm to hard vascular soft tissue lesion over the bone which was firmly adherent to the underlying irregularly surfaced bone.

- The bone was sclerotic.



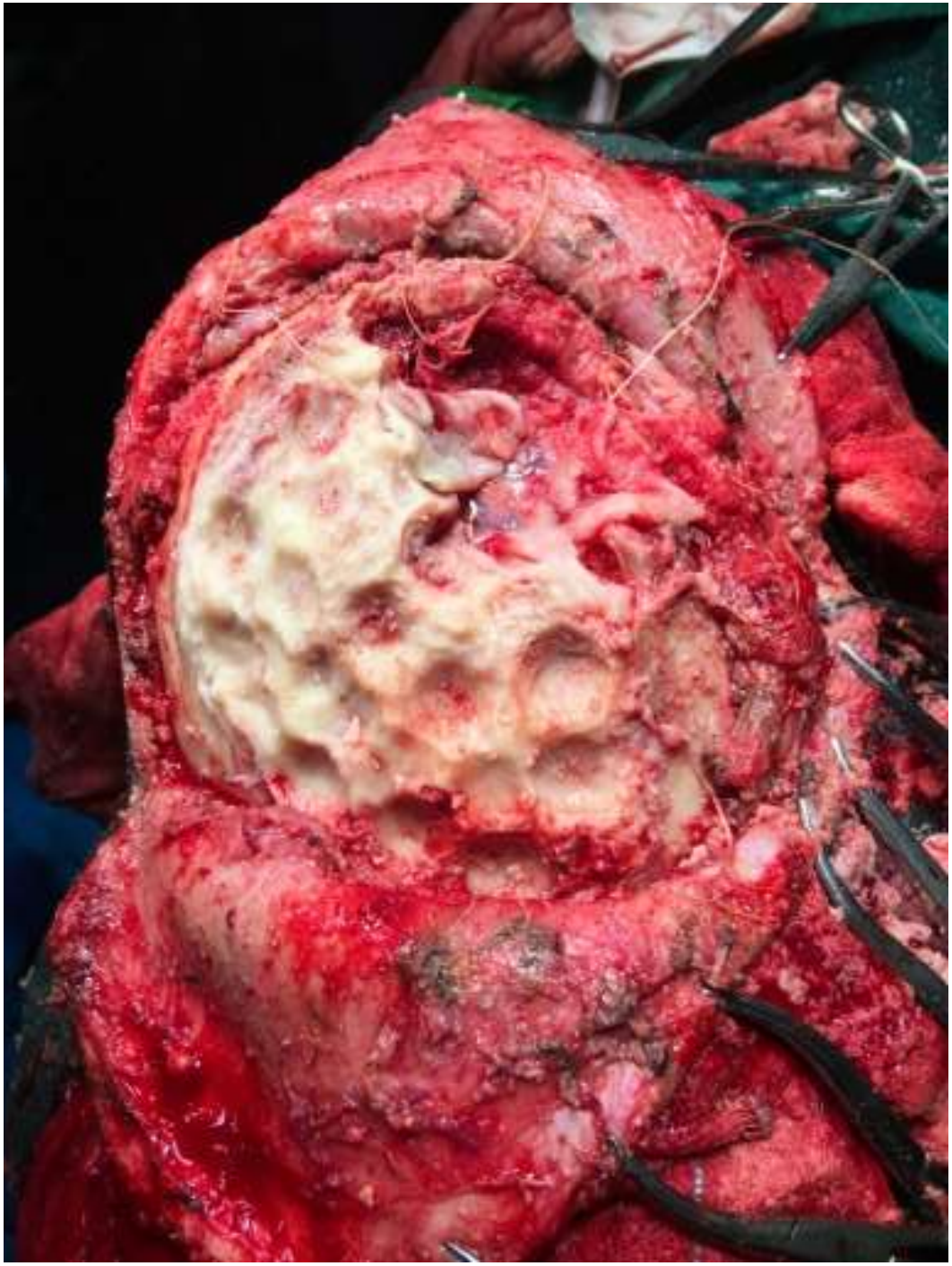




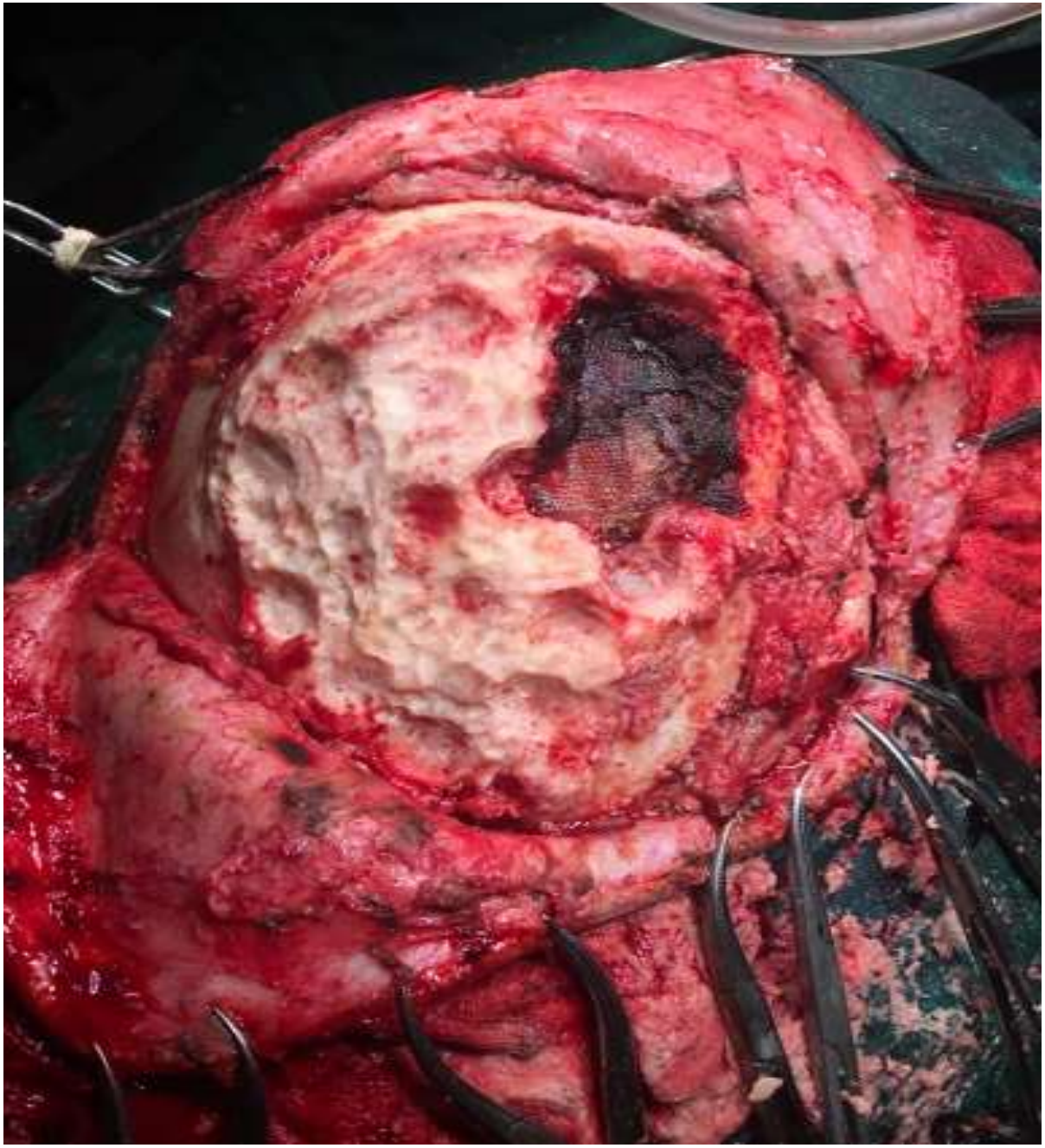


- However, in the bone there was no delineation between normal and abnormal bony tissue.

- Frozen section was done s/o meningioma.



- Frontal craniotomy was done.
- Underlying dura was thickened and stuck to the overlying bone.
- The thickened dura was excised and sent for biopsy.



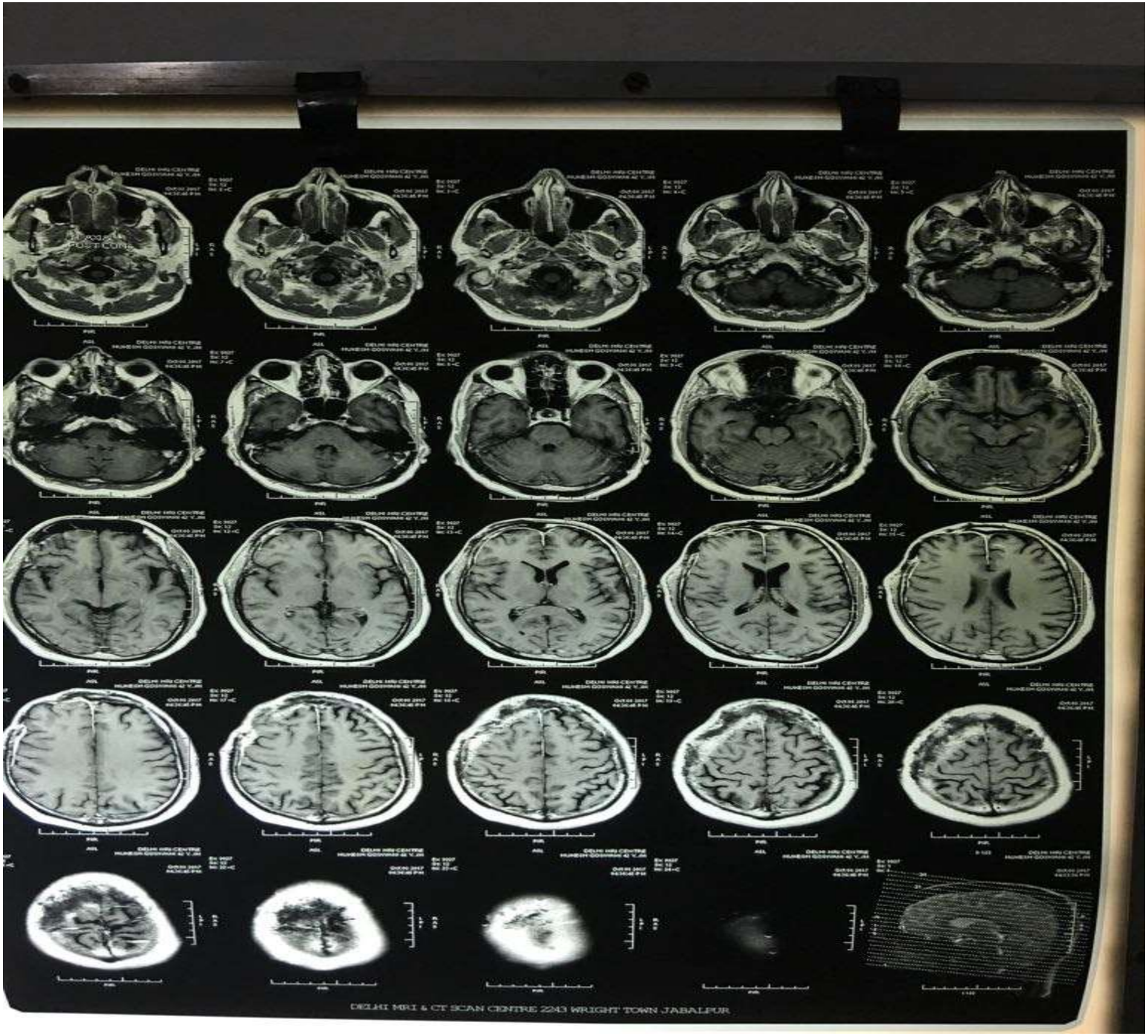
BIOPSY REPORT

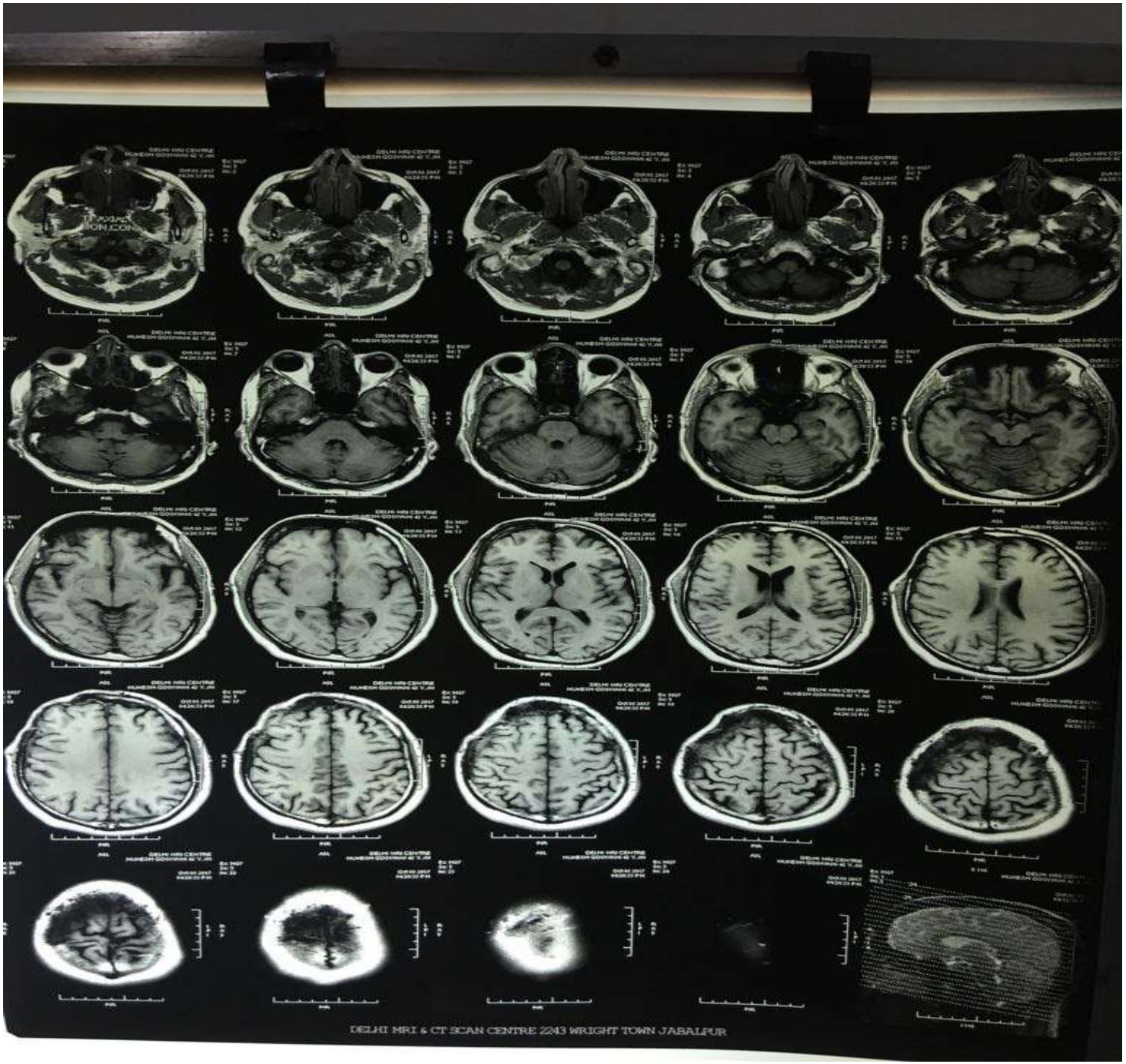
1) Excised extra cranial soft tissue component

2) Bone

3) Dura.

S/o meningiothelial meningioma (WHO Grade 1)


DELHI MRI & CT SCAN CENTRE 2243 WRIGHT TOWN JABALPUR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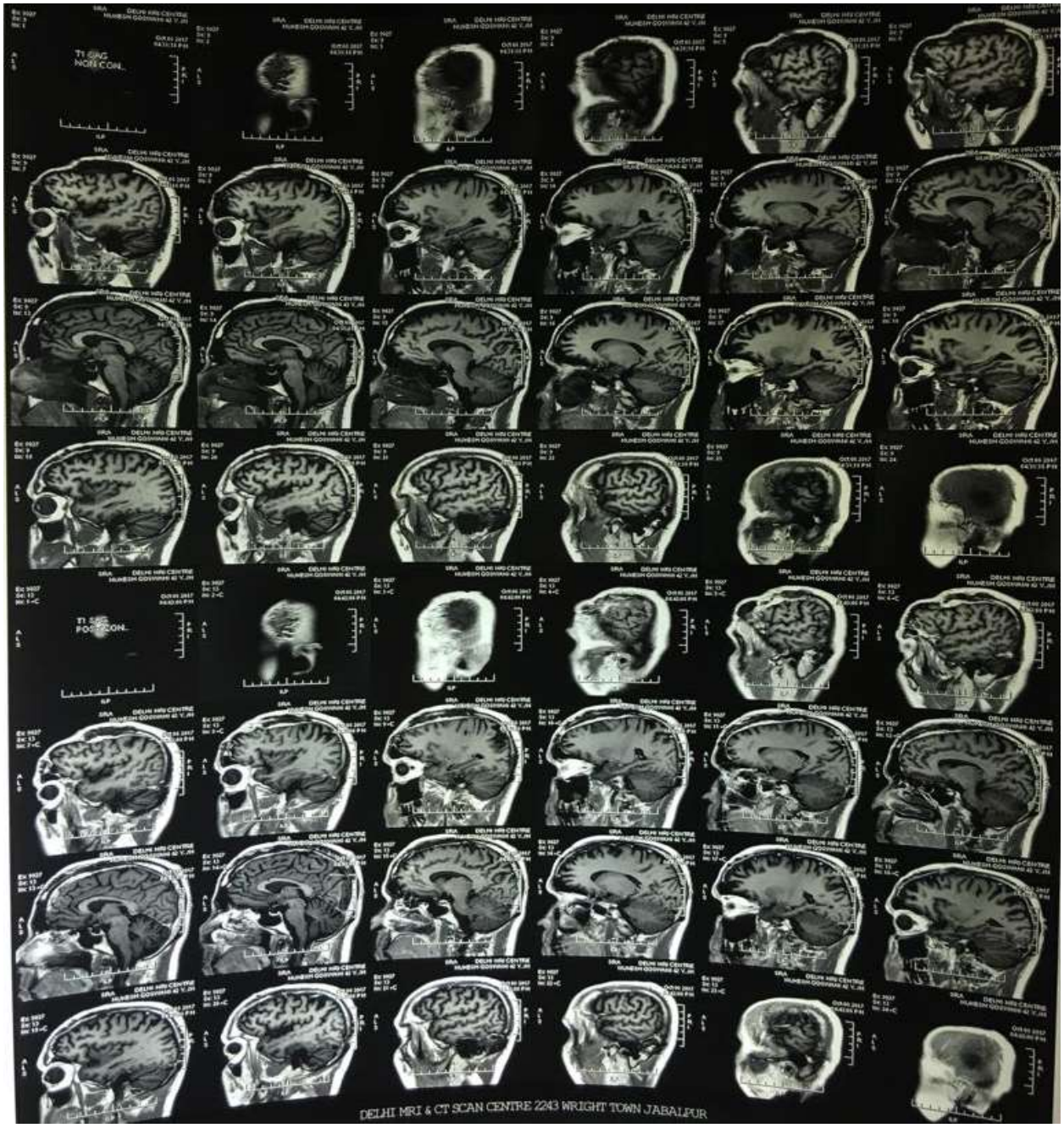
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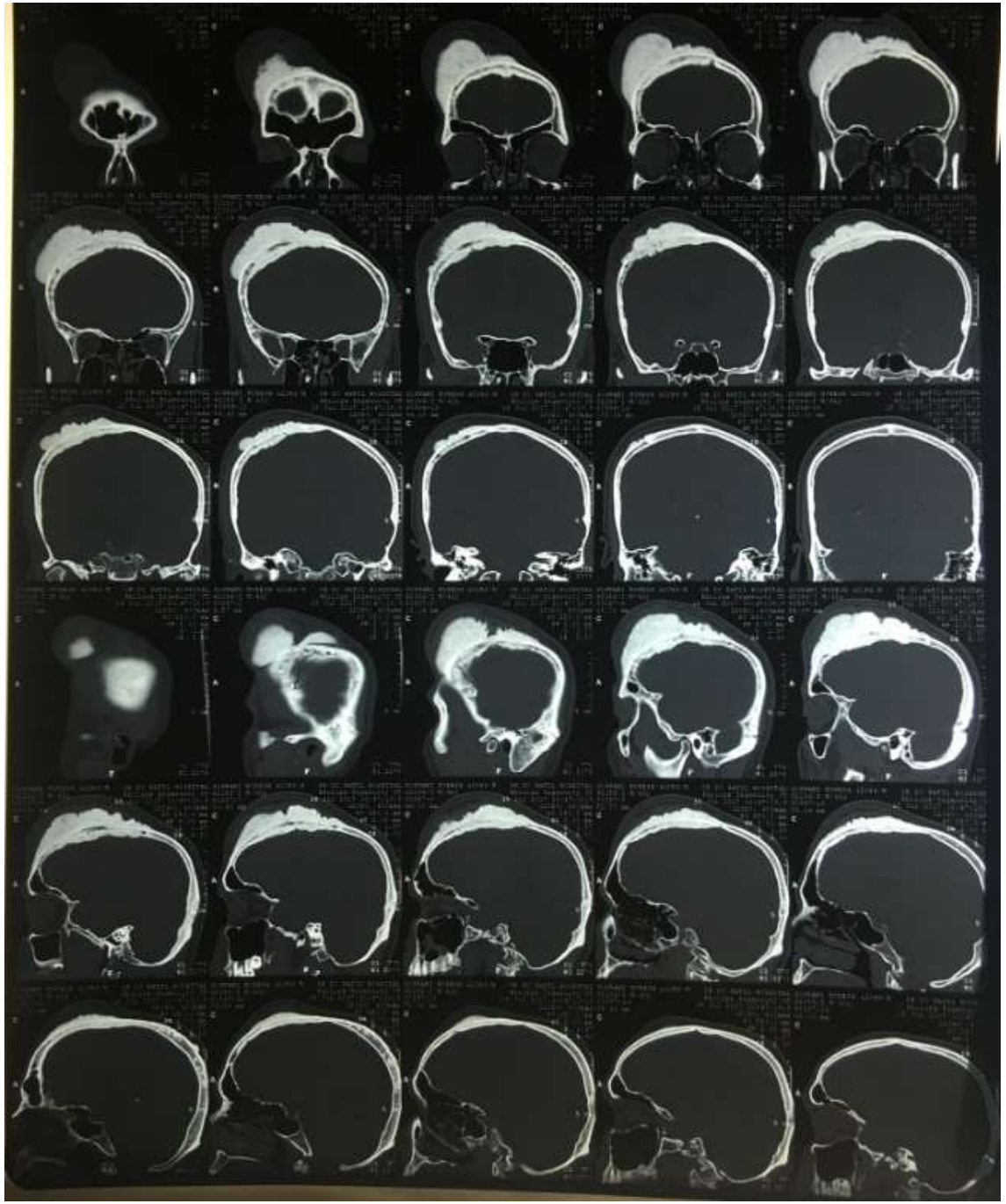
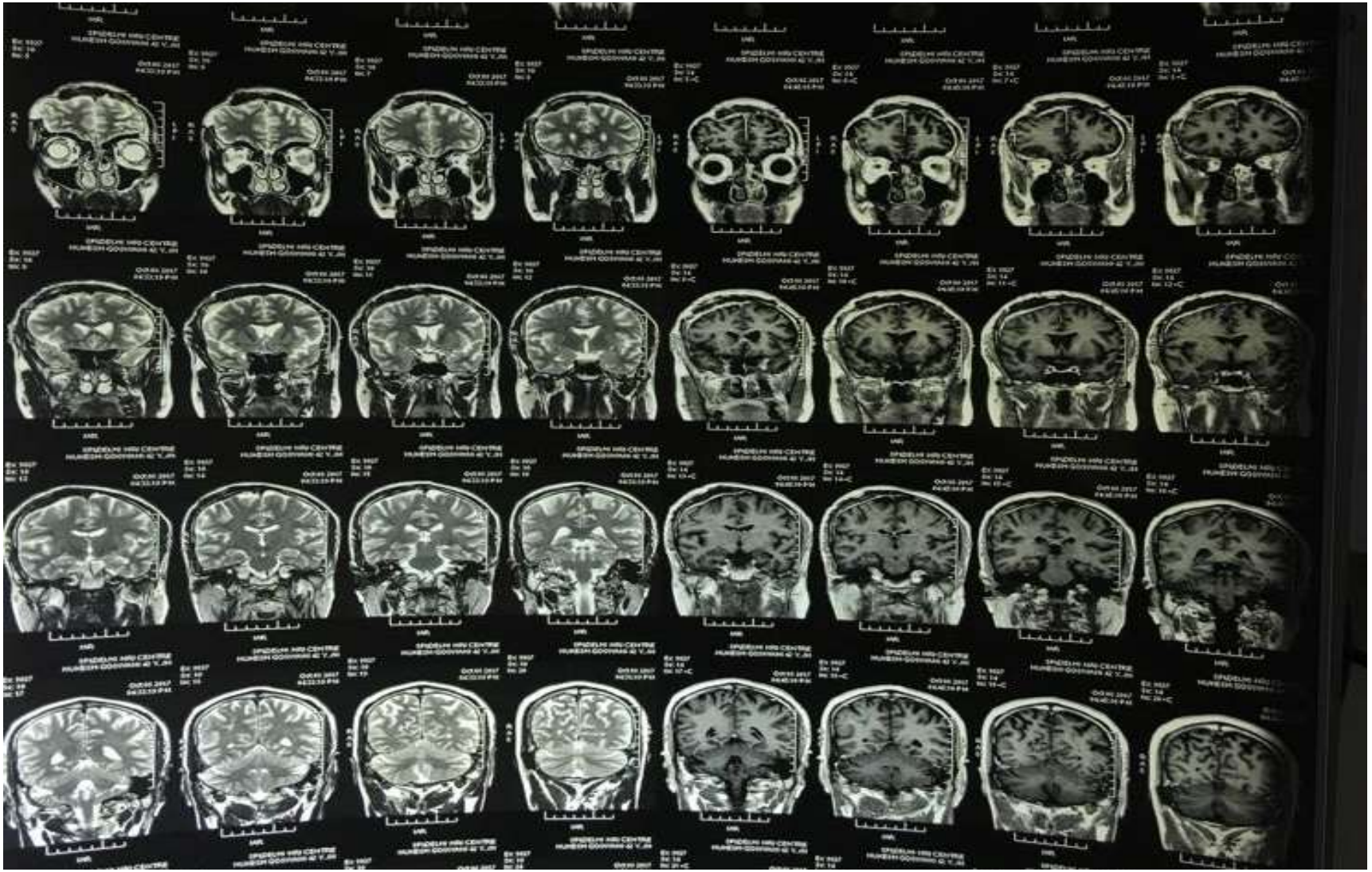
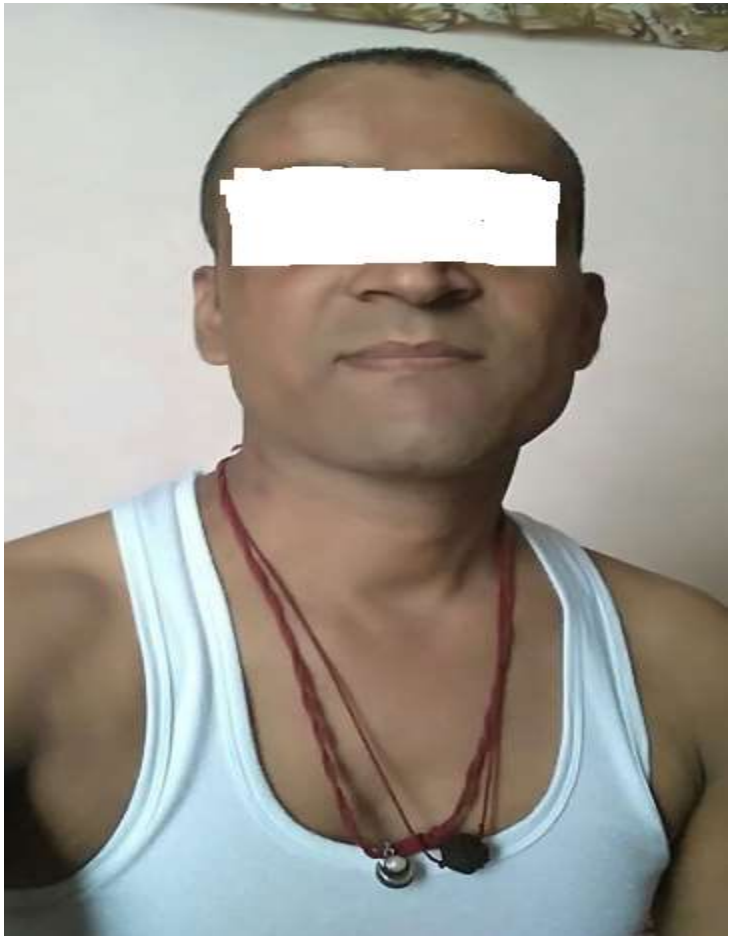




Post-op images:



Discussion:

- Meningioma is a common benign intracranial neoplasm.
- The incidence of an extra cranial extension to other sites is rare.
- Meningiomas that arise outside the skull are for the most part benign tumors.

From where do the extra cranial meningioma arise?

1. Arachnoidal cells are present in the sheaths of nerves or vessels where they emerge through the skull foramina.

2. Displaced pacchionian bodies become detached, pinched off, or entrapped during embryologic development in an extra cranial location.

3. A traumatic event or cerebral hypertension that displaces arachnoid location.

4. An origin from undifferentiated or multipotential mesenchymal cells.

- Symptoms are associated with the location of the lesion. Imaging studies may provide some suspicion of diagnosis, but confirmation relies on pathologic examination.

- The mainstay of treatment is complete excision of the tumor by appropriate approaches, often requiring multidisciplinary approach.

- The histologic features, while generally ‘‘characteristic’’, especially for meningothelial tumors, may be atypical, requiring separation from other tumor types, by both histologic and immunohistochemistry studies.

- Separation from other tumors is essential as extracranial meningioma seems to have an excellent long term prognosis with only limited recurrence.