



Figure 2: Computed tomography scan brain postoperative.

event telephonically as the patient did not come for routine follow-up.

DISCUSSION

Spinal dysraphism is an uncommon condition reported in 30-40/100,000 live births.^[5] Cervical meningoceles are rare spinal dysraphism, accounting for approximately 7% of all cystic spinal dysraphisms.^[7] Spinal dysraphism is the most frequent congenital malformation in neonates that require surgical intervention.^[4] There are differences in the classification of cervical spinal dysraphism cases. These can be listed as follows: limited dorsal myeloschisis, limited dorsal myeloschisis stalk, myelocystocele, fibroneurovascular stalk, myelomeningocele, and meningocele.^[6,8,9]

Meningocele is usually a soft cervical mass without marked neurological impairment at the time of diagnosis. External features of the cervical lesion are tubular protuberances at the back of neck covered at the base and most of the cylindrical wall by full-thickness skin and on the dome by thick squamous epithelium. It is recognized as a sac, which contains cerebrospinal fluid (CSF), neuroglial or fibrous tissue, formed as a result of herniation of the dura structure of the spinal midline defect, while myelomeningocele is recognized as a central sac, which contains neuroglial structures or a meningocele with a medulla spinalis.^[1-3] Complications

associated with meningoceles range from learning disabilities, seizures, and bowel dysfunction to complete paralysis below the level of the lesion. The postoperative complications reported are wound infection, CSF leak/collection, urinary tract infection, deterioration of deficit, and death and are rare. Here, we present a postoperative case of an 11-month-old child with cervical meningocele who had an unusual complication almost 2 h after an uneventful surgery in the form of sudden cardiorespiratory arrest. The patient was operated for excision of redundant sac with simple skin closure. The differential diagnosis of electrolyte disturbances, incomplete reversal leading to hypoxic arrest, hydrocephalus, postoperative hematoma, brainstem herniation, acute traumatic central cord syndrome (ATCCS), cervical cord edema, and coning was made, though more common with meningomyelocele and less likely to be seen in a case of meningocele surgery.

After resuscitation and stabilization, an arterial blood gas was done which did not show any electrolyte abnormalities, so the differential of electrolyte abnormality was ruled out. The patient was then immediately wheeled in for a CT brain with spine, which did not show any signs of hydrocephalus, raised intracranial pressure, brain stem herniation, or surgical site bleed, so these possibilities as a cause of deterioration were also ruled out. The possibility of inadequate reversal was very unlikely as the patient deteriorated after almost 2 h and the TOF was 90% on shifting to PACU. The differential of ATCCS looked unlikely as there was no hyperextension done at any time during surgery and there was no inciting trauma as well. Hence, the most probable diagnosis of cervical cord edema was made after ruling out other probable differentials. The possibility of a cervical cord handling was also put to question as after discussing with the neurosurgeon, we were assured that there was no spinal cord handling intraoperatively which could have been the case if it was a meningomyelocele. Hence, the definitive diagnosis of cardiac arrest is unclear, especially as it was within hours of surgery and anesthesia delivery. There is very scarce literature available regarding the postoperative complications associated with meningocele. We failed to find any report of a similar incident in the literature. Usually in a meningocele surgery, we do not expect any postoperative complications as in the case with meningomyelocele where there are various complications that can happen which have been mentioned above. Hence, one usually fails to anticipate the possible severe complications that can take place even in the case of meningocele. This case was an eye-opener for the fraternity at our institute regarding the standard operating procedures to be followed even in a case of a relatively uncomplicated meningocele surgery.

CONCLUSION

A meningocele surgery, i.e. excision of redundant sac with simple skin closure is usually not associated with severe

postoperative complications which can be encountered in meningomyelocele surgery. Here, in our case, the child with uneventful meningocele surgery arrested 2 h postsurgery with the possible cause being cervical cord edema. Hence, a lesson was learned that strict vigilance is also required in postoperative care for meningocele patients.

Declaration of patient consent

Patient's consent not required as patients identity is not disclosed or compromised.

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Conflicts of interest

There are no conflicts of interest.

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