

Oral presentation

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The ideal approach to back closure; Are we closing the backs properly ? Is laminectomy always necessary?

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Background

The surgical approach to primary 'back-closure' of meningocele differs, based on which specialist performs the closure. If the Neurosurgeons tend to be a bit overaggressive and perform more laminectomies than seems necessary, the Pediatric surgeons can be over cautious and tend to sometimes leave the intraspinal abnormality unattended. We believe that a golden mean is the best approach.

However, till date we had not evaluated the results of our back-closures and whether our approach had resulted in a successful morphological correction of the entire lesion – and not just a cosmetically satisfying outcome.

The retrospective study aims to evaluate the morphological results of our back closures and assess whether the postoperative neurological outcome had any relation to the morphology. The complications of the repair were also analysed and correlated to the surgical technique.

Materials and methods

Fourteen patients whose back lesions were closed more than an year ago were included in the study. Their present ages ranged from 1 1/2 years to 8 years. The follow up period corresponded to the age group i.e., 1 1/2 to 8 years as most of the lesions were closed in the first month of life.

All patients underwent a recent detailed postoperative MRI scan of the entire spine and skull. These MRI findings were compared with the pre-operative MRIs (wherever available) and the morphologic result was judged as an 'incomplete' or 'complete' correction.

The patients' neurological development was tracked and correlation to the postoperative morphology made. Surgical complications if any in these cases were recorded

Results

9 patients have so far undergone their recent MRI scans and 5 more will get their scans done in this month. The morphology of the operated cases will be presented with the pictures. In 7 of the 9 cases studied so far the repair has been complete. In one patient the laminectomy performed was retrospectively deemed as unnecessary – and the patient had a CSF leak in the postoperative period – which could be due to the overaggressive approach. On the other hand in one patient some of the intraspinal lipoma was left behind and may require removal.

Conclusion

The paper aims to discuss the optimal surgical approach for the back closure especially vis-à-vis the judicious use of laminectomies. The paper suggests that it is not necessary to perform a laminectomy in every patient.