Positioning For Anesthetic Induction Of Neonates With Encepalocele

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Citation

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Abstract

This is to describe a method of building a platform for positioning and intubation of a neonate with a large posteriorly-located encepalocele.

INTRODUCTION

Encephalocele, midline defect of cranial bone fusion, occurs most frequently in the occipital region. In those presenting with an intact encephalocele sac every measure should be applied to prevent rupture, and so preventing infection [1]. When the anesthesiologist is faced with a large posterior located encephalocele, endotracheal intubation becomes a challenge [2]. This is mostly related to difficulty in positioning the neonate on the back without pressing on the delicate encephalocele sac.

CASE

Our patient presented with a large encephalocele for anesthesia and surgical repair.

Figure 1

Figure 1: Encephalocele

A method for positioning this neonate for intubation is described. In this method (figure 2) the available cushions, headrests, donut head support or blankets may be used. In our case a blanket and bed cover were put down on top of each other under the neonate body until the height matched that of the encephalocele sac. The neonate was put in the supine position with the body on the platform while an assistant temporarily supported the head. The encephalocele is then circled by a “C” shaped gel foam donut. Under the donut a hollow head cushion, or if not available rolled soft towels, is inserted to build the same height as the platform. By doing so the encephalocele sac should be hanging freely in between the edges of the gel foam and towels, and just touching the table mattress, thus preventing pressure on it and possible rupture.

Figure 2

Figure 2: Positioning for intubation

The platform method is a great help to anesthesiologists and neurosurgeons especially when dealing with a large posterior located encephalocele. The same method may be applied for patients with meningocele [3]. This method may be well known to the practicing senior anesthesiologists and

neurosurgeons. This communication is mainly directed to the resident in training in both branches to reinforce the need of such methods to protect encephalocele sac. Medical equipment companies may also construct a ready-made platforms and head supports for use by neurosurgical centers.

References

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