

Evisceration Secondary to Coughing in a Child Undergoing Ventriculoperitoneal Shunt Surgery

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Abstract

Abdominal complications related to ventriculoperitoneal shunting are an entity described in the literature. Among these is evisceration. In this article we present a case of evisceration in a 5-month-old child, six days after DVP placement. We will discuss the probable etiology and prevention of such a complication.

Key words: complications; dvp; evisceration; child

Introduction

Ventriculoperitoneal shunt (VPS) is a neurosurgical procedure of choice in the treatment of hydrocephalus. It consists of drainage of cerebrospinal fluid (CSF) into the peritoneal cavity [1]. Several complications related to DVP have been described, either mechanical with obstruction or disconnections, or infectious, CSF leakage or abdominal. These include intestinal perforation, ascites, peritoneal pseudocyst, evisceration [2-5]. In this article, we report a case of evisceration through the abdominal incision that occurred 6 days after VPS in a 5-month-old infant. VPS was indicated for malformative tetraventricular hydrocephalus. This is the very first case reported at the Hospital in Ziguinchor.

Presentation of the case

This is a 5-month-old infant with a history of VPS for malformative tetraventricular hydrocephalus who presented six days after this procedure with altered consciousness associated with vomiting. On physical examination, he was obnoxious with a Blantyre score of 4/5, isocore and reactive pupils, spontaneously mobilizing all four limbs. Abdominally, there was evisceration of the intestinal loops. The intestines were pink and viable (Figure 1). The child was taken urgently to the operating theatre for reduction of the evisceration, the control of the functionality of the shunt was correct, we finally proceeded to repair the breach (Figure 1). The postoperative course was unremarkable and the child was discharged after a few days.

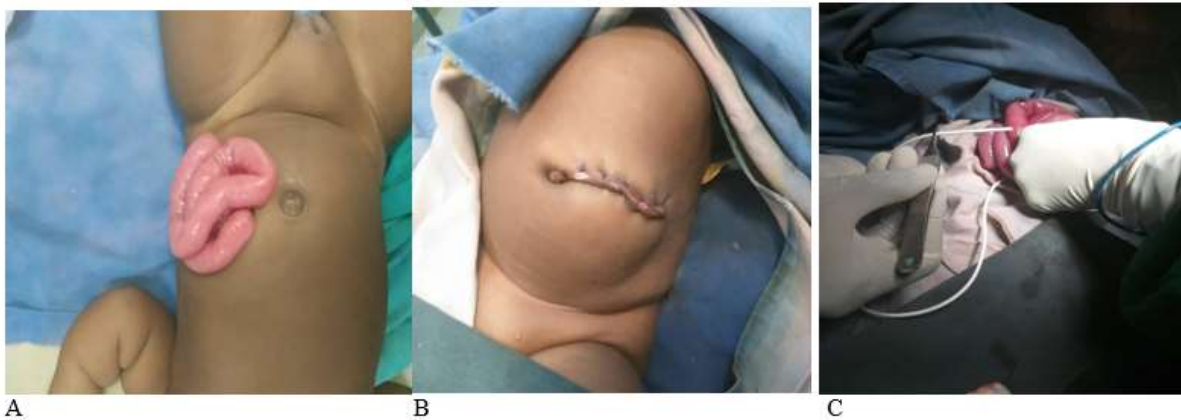


Figure 1: Image showing evisceration at DVP incision (A), image after breach repair (B), verification of drainage functionality (C)

Discussion

Peritoneal complications are possible after ventriculoperitoneal shunt [1]. The complication may occur acutely or insidiously, asymptomatic over a long period of time [6]. In our patient the onset of evisceration was acute, six days after the ventriculoperitoneal shunt. The probable cause of the evisceration was a loose closure of the abdominal wall after insertion of the distal intraperitoneal drain. The intra-abdominal pressure favoured intestinal exteriorisation. The aim of this article is to draw attention to the rigour to be put into the realisation of DVP in general and the tight closure of the abdominal wall in particular to prevent such complications.

Conclusion

Ventriculo-peritoneal shunting is the treatment of choice for hydrocephalus. It is nevertheless subject to a certain number of complications, particularly abdominal, such as evisceration due to a loose closure of the abdominal wall during the operation. Particular care must be taken when performing this procedure.

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Author contribution

All the authors

Registration of research studies

Not applicable.

Ethical approval

The study is exempted from ethical approval.

Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

Author Guarantor of the submission

Dr. Yakhya CISSE

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