



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.2603251>Available online at: <http://www.iajps.com>

Research Article

**AN ASSESSMENT OF A RARELY OCCURRING
COMPLICATION: VENTRICULOPERITONEAL (VP) ANAL
EXTRUSION**¹Dr Muhammad Uzair Asghar, ²Dr um-e-salma, ³Dr. Mughis Ahmad¹Medical Officer Basic Health Unit 322/JB Tehsil and District Toba Tek Singh²Shalamar Hospital³House Officer Nishtar Hospital Multan**Article Received:** January 2019**Accepted:** February 2019**Published:** March 2019**Abstract:**

The complexity of anal extrusion of ventriculoperitoneal (VP) is an infrequent complexity of shunt surgery for hydrocephalus. This case study is about a baby whose age was three years. The baby was identified with post ventriculoperitoneal (VP) shunting. She was managed at Sir Ganga Ram Hospital, Lahore in October 2017. The patient was found with subdiaphragmatic abscess after 14 days. She was discharged after draining in a pediatric surgical unit. She once again developed extrusion of VP shunt from the anus after 14 days. VP shunt was removed and a new one was placed. But after one week, the baby suffered from CSF leakage. Then abscess was drained. VP shunt was transferred into VC shunt by surgery. No symptom was left and the baby was discharged.

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Please cite this article in press Arifa Tariq et al., *An Assessment Of A Rarely Occurring Complication: Ventriculoperitoneal (VP) Anal Extrusion.*, Indo Am. J. P. Sci, 2019; 06(03).

INTRODUCTION:

Absorption of Cerebrospinal Fluid (CSF) and irregularity of its formation cause hydrocephalus. When abundant CSF is stored in the ventricular system, the condition is referred to as hydrocephalus. For the purpose of CSF diversion in unconscious with hydrocephalus, various kinds of shunting methods have been suggested. For children having hydrocephalus, best shunting techniques for many years were considered as ventriculoarterial and ventriculogugular methods [1]. In recent days, the most frequently used technique for hydrocephalus is ventriculoarterial (VP) shunting. Shunt blockage, shunt infection and over drainage are usual complexities related to the shunting method [2]. Shunt catheter coiled within the urinary bladder abdominal pseudocyst formation, colonic perforation, intestinal blockage, transferring of VP catheter, spontaneous extrusion of the shunt, trans nasal prolapse of peritoneal catheter and cerebrospinal fluid ascites are infrequently found complexities [3, 5 – 11]. Above fifty percent of children who had shunt surgery in the 1970s were students of normal schools [10]. Greater danger of morbidity and death are associated with bowel perforation with various pathways suggested [2, 4, 12]. In this case, extrusion of the caudal part of VP shunt was noticed, which was infrequent complexity [13 – 16].

CASE REPORT:

This research was carried out at Sir Ganga Ram Hospital, Lahore in October 2017. The case study was about a three years old female child. She was found with excess vomiting, increased head size and irritability. Hydrocephalus was observed by CT scan. A ventricular peritoneal shunt was placed inpatient. The patient was found to have fits, fever and vomiting after thirty days when examined by different physicians. CSF assessment of patient was made. Acute pyogenic meningitis was identified through this assessment. For about 14 days, the patient was managed. She was discharged in good health. She was found with abdominal pain, fever and vomiting after one month when examined by a pediatric surgeon. The patient was identified with a sub-diaphragmatic abscess. The abscess was drained through cutting peritoneal catheter, its size was decreased. When the fever becomes normal and reports of CSF culture and blood culture showed no organisms, the patient was discharged. The patient was presented with fever and extrusion of the peritoneal catheter through the anus in the neurosurgery outpatient department after about fourteen days. The peritoneal catheter was removed and a new one is added by surgery. The patient was

allowed to go home after ten days. But the patient returned after seven days. The patient suffered from leakage of CSF from abdominal injury from where the sub-diaphragmatic abscess had been drained. VP shunt was transferred into a ventriculocavol shunt by surgery. The patient recovered and the patient was discharged.



Figure – I: Extruding Peritoneal Part of VP Shunt from Anus



Figure – II: Preoperative finding, distal Peritoneal catheter is perforating and penetrating the sigmoid colon

DISCUSSION:

Majority of children having hydrocephalus reach adulthood if VP shunt is taken care properly [6]. Various complexities result due to VP shunt [7 – 12]. Children having hydrocephalus had bad prognosis before the development of shunt technique [9]. About 80% of shunts commonly found with mechanical complexities at some phase of life. One-third of these

complexities result within the first year of shunt insertion [8]. To control the complexities of shunt surgery, the patients and doctors must have an ongoing association. The complexities of shunt infection are more common in younger patients especially patients of below six months. In five to ten percent of all the shunt operations, these complexities developed [9]. Both infective and mechanical complexities are observed in the patient of our study [13, 14]. Very fewer patients are observed with extrusion of shunt by means of the anus as it is infrequent [14]. Similar to our study, most of the patients are young and unconscious.

CONCLUSION:

During the previous fourteen years of VP shunt surgery carried in our hospital, this is the only case that is reported. It is due to the reason that anal extrusion is infrequent complexity.

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