

REVIEW PAPER

Post-Operative Complications of Ventriculoperitoneal Shunt in Hydrocephalic Pediatric Patients-Nursing Care

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Abstract

Introduction: Hydrocephalus is the most common congenital abnormality of the central nervous system in infants. Many cases of hydrocephalic children are described since ancient times. It is characterized by excessive accumulation of cerebrospinal fluid in the ventricles of the brain. Its symptomatology during infancy or early childhood is characterized by swelling of the head, protrusion of the forehead and brain atrophy. All these symptoms appear due to increased cerebrospinal fluid volume, increased intracranial pressure and dilatation of the ventricular walls.

Aim: The aim of this paper is to describe the ventriculoperitoneal shunt complications in pediatric patients and to point out the role of nursing staff in the prevention of them.

Methods: This includes literature search on the database Medline and relevant with that issue international hydrocephalus organizations to identify studies regarding the complications of ventriculoperitoneal shunt and the nursing care for each complication.

Results: Ventriculoperitoneal shunt is the treatment of hydrocephalic infants, rather than endoscopic third ventriculostomy. Although the success of the ventriculoperitoneal shunt's placement, the patients usually suffer from its afterwards complications. The complications involve postoperative shunt infection, shunt placement failure, shunt obstruction – malfunction, abdominal complications – peritonitis, valve complications, slit-ventricle syndrome and seizures. The role of the nursing staff is vital, particularly in the postoperative weeks.

Conclusion: A proper nursing assessment includes valid identification of complications and their prompt treatment. Also, nurses had to implement accurate nursing care, in order to prevent any complication. Finally, parental teaching from the nurses is crucial in the process of health outcomes for pediatric patient.

Key Words: hydrocephalus, children, complications, ventriculoperitoneal shunt, nursing care.