

CO-014 - (1JDP-9847) - RICKHAM RESERVOIR IN THE TREATMENT OF POSTHEMORRHAGIC HYDROCEPHALUS IN PRETERM INFANTS

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Introdução e Objectivos

Intraventricular hemorrhage (IVH) is the most common neurological complication of very low birth weight and the main cause of hydrocephalus in neonates. Surgical diversion of cerebrospinal fluid (CSF) is the mainstay of treatment in posthemorrhagic hydrocephalus (PHH). Temporary devices are often used in small infants or when it is unclear if permanent shunting will be required; these include ventricular access devices such as the Rickham reservoir.

Metodologia

Retrospective review of all cases of hydrocephalus requiring the placement of a ventricular access device admitted to a level III Neonatal Intensive Care Unit over a 16-month period after the introduction of the Rickham reservoir in our practice (Ommaya reservoirs were used before).

Resultados

We identified 7 cases (6 male, median gestational age 27 weeks, median birth weight 1050 g). IVH was the cause of hydrocephalus in all cases (1 grade II, 2 grade III, 4 IVH with periventricular infarction). Rickham reservoir was placed at a median 30 weeks of postmenstrual age (minimum 28 weeks) and median weight of 1090 g (minimum 770 g). There were 3 reservoir related complications (2 infections, 1 obstruction) and 1 case of iatrogenic hyponatremia. Reservoir removal was possible in 1 infant after stabilization of ventricular dimensions. Six infants required ventriculoperitoneal shunt placement.

Conclusões

Our small case series illustrates the safety and effectiveness of the Rickham reservoir. Plasma and urinary sodium should be monitored while daily punctures are required. This device allows earlier CSF diversion in smaller infants (in our series at a minimum of 770 g). Whether earlier intervention will decrease the need for permanent shunting or improve neurodevelopmental outcomes is currently under investigation.

Palavras-chave : intraventricular hemorrhage, hydrocephalus, very low birth weight, preterm infant, Rickham reservoir