

FP110**The role of endoscopic third ventriculostomy in the management of CSF shunt malfunction**

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Introduction: The advent and evolution of neuroendoscopic techniques offered effective alternatives to CSF shunting in the management of obstructive hydrocephalus, and endoscopic third ventriculostomy (ETV) performed as the initial procedure (Primary ETV), avoided shunt implantation in the majority of these patients.

Furthermore, considering the noticeable risks related with the repeated shunt operations, ETV was taken into account as a valuable aid in case of shunt malfunction in order to freeing the patient from the shunt.

Methods: Since year 2000, 35 selected cases of shunt malfunction (25 children), were treated by a secondary ETV with the aim of a subsequent shunt removal.

Our protocol consist of a preoperative MRI, ETV, ligation of the distal catheter, postoperative clinical and neuroradiological surveillance.

In our recent cases monitoring of the intracranial pressure was started during surgery and continued up to 72 hours.

Results: Secondary ETV ensured 75% of good clinical and radiological results; the remaining patients underwent a new shunt insertion.

We registered only 5 cases of minor complications (aseptic meningitis/mild headache).

Surgical results with respect to the aetiology of the hydrocephalus and the duration of the shunt are analysed in detail.

Conclusions: In case of shunt malfunction, regardless the shunt duration, a secondary ETV should be considered in most of the cases. To identify the most suitable cases a preoperative MRI is mandatory. Intracranial pressure monitoring in the postoperative period can give immediate data on the efficacy of the treatment.