# Myelomeningocele-associated hydrocephalus treatment

Traditionally, ventriculoperitoneal shunts have been used for myelomeningocele-associated hydrocephalus. A role for endoscopic third ventriculostomy (ETV) in MM has provoked much debate, principally due to anatomical variants described, which may complicate the procedure. Various anatomical situations and specific ventricular configurations (The most common anatomical features were “thick and prominent massa intermedia” (37.1%) and “narrow tuber cinereum” (33.1%)) of MAH cases may add an operative factor of difficulty which should be well recognized by the neurosurgeon who plans and executes an ETV procedure in this patient population [1].

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From 1998 to 2014, hydrocephalus treatment has become more delayed and the number of hydrocephalic MMC patients not treated on initial inpatient stay has increased. A meta-analysis demonstrated that shunt malfunction and infection rates do not differ between delayed and simultaneous hydrocephalus treatment [2]

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Myelomeningocele patients with prominent hydrocephalus frequently have friable skin, due to reduced macrocrania-related subcutaneous tissues. Small-sized (neonatal-design or ultra-small) valves may significantly reduce the early shunt complication rate among this population [3].

## Endoscopic third ventriculostomy and choroid plexus cauterization

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## References

1)
Etus V, Guler TM, Karabagli H. Third Ventricle Floor Variations and Abnormalities in Myelomeningocele-Associated Hydrocephalus: Our Experience with 455 Endoscopic Third Ventriculostomy Procedures. Turk Neurosurg. 2017;27(5):768-771. doi: 10.5137/1019-5149.JTN.18706-16.1. PMID: 27858385.
2)
McCarthy DJ, Sheinberg DL, Luther E, McCrea HJ. Myelomeningocele-associated hydrocephalus: nationwide analysis and systematic review. Neurosurg Focus. 2019 Oct 1;47(4):E5. doi: 10.3171/2019.7.FOCUS19469. PMID: 31574479.
3)
Kahilogullari G, Etus V, Guler TM, Karabagli H, Unlu A. Does Shunt Selection Affect the Rate of Early Shunt Complications in Neonatal Myelomeningocele-Associated Hydrocephalus? A Multi-Center Study. Turk Neurosurg. 2018;28(2):303-306. doi: 10.5137/1019-5149.JTN.18547-16.1. PMID: 27593850.