COMPLICATION OF

ENDOSCOPIC THIRD VENTRICULOSTOMY

HYDROCEPHALUS/ POSTERIOR FOSSA TUMOR
HYDROCEPHALUS/ POSTERIOR FOSSA TUMOR

- INCREASED INTRACRANIAL PRESSURE (ICP)
- CRANIAL NERVE DEFICITS
- SEIZURE, TIA…
HYDROCEPHALUS/ POSTERIOR FOSSA TUMOR

- VP shunt: Ventriculoperitoneal shunt
- ETV: Endoscopic third ventriculostomy
- EVD: External Ventricular Drainage
-1910, Victor Darwin Lespinasse, Chicago:
  2 children
  \textbullet{} Cauterized the choroid plexus
  \textbullet{} One child died immediately, live for 5 yrs
-1918, Walter Dandy:
  . 4 infant
  . Extirpated choroid plexus
  . Only one infant survived

-1922, the first third ventriculostomy
ENDOSCOPIC THIRD VENTRICULOSTOMY

-1923, W. Jason Mixter:
  . The first ETV
  . Urethroscope
  . A 9-year-old girl
-1963, Scaff: Fiberoptic
-2002, Krombach : combined MRI
ENDOSCOPIC THIRD VENTRICULOSTOMY

2004-2011

2011-2016

2017
ENDOSCOPIC THIRD VENTRICULOPLASTY
ENDOSCOPIC THIRD VENTRICULOSTOMY
ENDOSCOPIC THIRD VENTRICULOLOSTOMY
COMPLICATIONS

  
  . Hypothalamic injury
  . Injury to pituitary stalk or gland
  . Transient 3\textsuperscript{rd} and 6\textsuperscript{th} nerve palsies
  . Injury to basilar artery, p-comn, or PCA
  . Uncontrollable bleeding
  . Bradycadia with cardiac arrest
  . Traumatic basilar artery aneurysm
COMPLICATIONS

  
  . Hemorrhage (9%-15%)
  
  . Nerve damage (transient)
  
  . CSF leak with meningitis (5%-7%)
COMPLICATIONS

Complications of endoscopic third ventriculostomy

Triantafyllos Bouras, M.D., and Spyros Sgouros, M.D., F.R.C.S.(S.N.)


- The overall complication rate: 8.5%

- neurological: 1.44%

- intraoperative hemorrhage: 3.7% (basilar: 0.21%)

- pos.op mortality: 0.21% (sepsis+ hemorrhage)

- CSF leak: 1.61%
COMPLICATIONS

Endoscopic third ventriculostomy: outcome analysis in 368 procedures: Clinical article

Oumar Sacko, M.D., Sergio Boetto, M.D., Valérie Lauwers-Cances, M.D., Martin Dupuy, M.D., and Franck-Emmanuel Roux, M.D., Ph.D.


-CSF leak: 3.1%
-Menigitis: 2.3%
-Hemorrhage: 1.7%
-Subdural CSF collection: 1.7%
-Seizure: 1%
COMPLICATIONS

Endoscopic options in children: experience with 134 procedures: Clinical article

Joachim M. K. Oertel, M.D., Ph.D., Joerg Baldauf, M.D., Henry W. S. Schroeder, M.D., Ph.D., and Michael R. Gaab, M.D., Ph.D.


- Transient: 13%
- CSF leak: 4.4%
- Meningitis: 2.9%
- Epidural hematoma: 2.2%
- Trochlear nerve palsy: 0.7%
- Transient hemiparesis: 0.7%
COMPLICATIONS

Complications of endoscopic third ventriculostomy

Henry W. S. Schroeder, M.D., Ph.D., Wulf-Rüdiger Niendorf, M.D., and Michael R. Gaab, M.D., Ph.D.

Journal of Neurosurgery Jun 2002 / Vol. 96 / No. 6, Pages 1032-1040
(188 patient, single institution)

- Mortality: 1% (1: infection, 1: basilar artery)
- Permanent deficit: 1.6%
- Transient: 7.8% (meningitis, confusion, oculomotor, decrease of consciousness)
- Asymptomatic: 4.7%
CASE REPORT

- LE QUOC BINH
  14/09/2017

- 28/09/2017: ETV

- 28/09/2017: EVD+OP

- 16/10/2017:

- 24/10/2017: