Subduroperitoneal shunts for subdural hematomas in infants

Bs. Đặng Xuân Vinh
SDP shunts for SDH in infants

-Acute subdural hematoma:
SDP shunts for SDH in infants

-Chronic subdural hematoma:
SDP shunts for SDH in infants

-Chronic subdural hematoma (treatment):

- subdural drain:

- burr holes:

- SDP Shunt:
SDP shunts for SDH in infants

- SDP Shunts:
SDP shunts for SDH in infants

- Complication of SDP Shunt:
  - Undershunting
  - Infection
  - Seizures
  - Problems related to the distal catheter
  - Skin breakdown over hardware
  - Hemorrhage
Factors influencing the complication rate of subduroperitoneal shunt placement for the treatment of subdural hematomas in infants

SENTA KURSCHEL, M.D. STÉPHANIE PUGET, M.D. MARIE BOURGEOIS, M.D. MICHEL ZERAH, M.D. PETRA OFNER....
Object/Clinical Material and Methods

- 161 infants.
- SDP Shunts.
Discussion

- Causes of SDH.
- Presenting Symptoms of SDH: status epilepticus.
- Neuroimaging Findings:
  - Areas of high density in the subdural fluid collections.
  - Ischemic injury.
  - Cerebral atrophy and ventricular dilation.
  - Large- and medium-sized residual SDHs.
- Prior Attempts at Drainage.
- Surgical Treatment.
- Shunt-Related Complications: 22.4%
- Duration of Shunt Treatment: $6 \pm 4$ ms (0-31 ms).
- Follow-Up Period: 0-99 ms (27 $\pm 19$, median 25).
**Discussion**

- **Shunt-Related Complications**:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstruction</td>
<td>27</td>
<td>16.8</td>
</tr>
<tr>
<td>Infection</td>
<td>8</td>
<td>5.0</td>
</tr>
<tr>
<td>Disconnection</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>Migration</td>
<td>3</td>
<td>1.9</td>
</tr>
<tr>
<td>CSF leak/skin ulceration</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Subdural symptomatic rebleeding</td>
<td>1</td>
<td>0.6</td>
</tr>
</tbody>
</table>
Other Treatment Measures for SDH:
- Subdural puncture: other failure rate: 6.7-100%. bleeding - infection: 25%.
- Burr hole drainage.
- ESD: failure rate: 5.6-49% → SDP shunt

Complication corresponding to treatment: 0-35
Case report
Conclusions

The early placement of an SDP shunt is in our opinion the best treatment option to control chronic SDH.
LỄ KHÁNH THÀNH KHOA NGOẠI THẦN KINH & MỪNG NGÀY QUỐC TẾ THIỂU NHI
01/06/2011