LimiTorr™
Volume Limiting CSF Drainage System

The Only Volume-Limiting CSF Drainage System
Provides Clinicians Ultimate Confidence by Reducing the Risk of Overdrainage

Innovative, volume-limiting technology designed for patient safety

- LimiTorr is the only drain designed to prevent the risk of sentinel events caused by CSF overdrainage¹,²
- Two burette configurations: automatic flow shut off when CSF volume reaches 20mL or 30mL

LimiTorr helps mitigate concerns for overdrainage

- Reduces the need for continuous nursing observation, even with patients who are more mobile
- Provide clinicians an added level of security in a complex and challenging clinical environment

References:

integralife.com
**Lumbar Drainage**

**Ordering Information**

**Volume Limiting CSF Drainage System**

**LimiTorr™**

**Complete CSF Drainage Solutions**

- Do not use device on an IV Pole or INS 400 series Pole Mount that has been damaged and is not capable of a consistent vertical position. (ie. broken casters, bent pole, etc.)
- If pressure monitoring includes the use of...
- Do not insert needle into needleless sampling site.
- System is not reusable.
- If system is dropped, the volume limiting valve mechanism may be damaged and should be discarded.
- Use of Needle will damage needleless...

**Precautions:**

- Inform the patient or their representative of possible complications associated with the use of this system.
- In order for the volume limiting valve to operate correctly; the lumbar drain must remain vertical.
- MR safe
- Squeeze-Lok™ tabs designed
- Puncture-proof cap prevents accidental puncture
- Fully disposable
- The only volume-limiting CSF drainage system
- Automatic flow shut off at volume limit
- Two burrett configurations: 20mL and 30 mL
- Various configurations: open, closed tips
- Various configurations: 1.3mm, 1.9mm, 2.7/5.8mm
- Small: inner diameter 1.3mm
- Regular: inner diameter 1.6mm
- Trauma: inner diameter 1.9mm

**Contraindications:**

- This device is not designed, sold, or intended for use except as indicated.
- ICP Monitoring and External CSF Drainage is contraindicated in the following: anticoagulation therapy and coagulation disorders.
- System use is contraindicated where trained personnel are not available to supervise drainage and monitoring on a 24 hour a day basis.
- Catheter placement is contraindicated in the presence of infections in the surrounding area including the scalp skin, subcutaneous tissue, bone and epidural space.

The use of a lumbar catheter for drainage is contraindicated for patients with noncommunicating hydrocephalus, where lumbar puncture is contraindicated, in the presence of a large intracranial mass, lesion, tumor, hematoma or cyst, with demonstrated blockage of CSF to the subarachnoid space due to trauma, tumor, hematoma or other large mass, and in cases of spinal abnormalities that prevent insertion of a catheter.

**Warnings:**

- Patients connected to a cerebrospinal fluid drainage systems must be observed for signs and symptoms of changing intracranial pressure. These signs and symptoms may vary from patient to patient. Increased intracranial pressure may be characterized by, but not limited to, headache, vomiting, irritability, listlessness, drowsiness, other signs of deterioration of consciousness and nuchal rigidity. In an infant, increased scalp tension at the anterior fontanelle and congestion of scalp veins may be noted. Failure to adjust the rate of CSF outflow through the external drainage system may result in potentially serious injury to the patient. Improper drainage system set-up can lead to overdrainage or underdrainage and potentially serious injury to the patient. In order to minimize the possibility of infection, meningitis, or ventriculitis, the sampling site should be cleaned according to hospital protocol prior to use.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
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<tbody>
<tr>
<td>INS8400</td>
<td>AccuDrain without the Anti-Reflux valve</td>
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<tr>
<td>INS840t</td>
<td>AccuDrain with Anti-Reflux Valve</td>
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<tr>
<td>INS9020</td>
<td>LimiTorr Volume Limiting CSF Drainage System, 20mL</td>
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<tr>
<td>INS9030</td>
<td>LimiTorr Volume Limiting CSF Drainage System, 30mL</td>
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<tr>
<td>INSHITH</td>
<td>Cranial Access Kit (HITH)</td>
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<tr>
<td>82-6612</td>
<td>Cranial Access Kit (razor-free with sodium chloride and XYLOCAINE®)</td>
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