Massachusetts General Hospital
Neuro ICU Mannitol Guideline for Mannitol Rx of Increased ICP

- MD order for patient with ICP monitoring: Mannitol 1gKg q6 hours p.r.n. ICP > XX. Hold for Icp<15mmhg. Hold for Na>160 or (Osm >310 and osm gap >10) and call HO/fellow.

- MD order for patient without ICP monitoring: Mannitol 1g/kg q6 hours. Hold for Na >160 or (Osm >310 and osm gap >10) and call HO/fellow.

- Check Na, BUN, Cr, glu, osm q6 hours.
  - Must be drawn one hour prior to any mannitol dosing

RN Procedure
Administer first dose

5 hours

Important that all lab work values are drawn one hour before administration as gap is influenced by time.

Check Na, BUN, glucose, osm
Is osm > 310?

Yes

Calculate the osm gap.

<table>
<thead>
<tr>
<th>Gap &lt; 10 &amp; Na &lt;160</th>
<th>If gap &gt;10 or Na&gt;160</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give Mannitol</td>
<td>Hold mannitol</td>
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<tr>
<td></td>
<td>&amp; notify HO/Fellow</td>
</tr>
</tbody>
</table>

No

Administer next dose of mannitol

Important points:
- Osm gap = measured osm - calculated osm.
- Calculated osm = 2(Na) + BUN/2.8 + Glu/18
- For patients who retain an osm gap > 10 or a Na >160 call H.O. or fellow. If osm gap is less than zero problem with labs or calculation has occurred. Call M.D.
- MD may order 23.4% saline or 3% NaCl.