EMERGENT BURR HOLE in the ED
for decompression of Epidural or Subdural Hematoma

Indication
1. GCS < 8, and
2. Epidural or Subdural bleed with midline shift on CT*, and
   (*CT not necessary in crashing patient with high suspicion.)
3. Unequal pupils, and
4. Timely Neurosurgical service NOT available

“WAS AWAKE, NOW CRUMPING!”
Delay in decompression correlates with poor prognosis.

Landmarks

Typically temporal (80%), but go to the middle of wherever the CT indicates the hematoma lies!
**If crashing, drill temporal lobe on SAME side as dilated pupil! If not better, then do other side.**

Equipment
1. Hair razor/scissors
2. Scalpel
3. Retractor
4. Drill with drill-bit
5. Sharp hook
6. Suction tip
7. Dressing

Procedure
1. Find Landmark.
2. Cut/shave hair to make wide clear area.
3. Clean with betadine/chlorhexidine.
4. Cut incision down to bone (direct pressure on bleeding).
5. Use retractor to hold incision open.
6. Push or scrape periosteum off bone with knife handle.
7. DRILL perpendicular to bone (ideally apply saline drip/rinse). Will likely go through two layers/tables of bone.
8. STOP once loss of resistance (clutch mechanism may stop drill automatically).
9. Epidural blood should evacuate.
10. Carefully suction if necessary, don’t suction brain.
11. Gently cover, no pressure, with sterile dressing.
12. Give dose of IV Ceftriaxone time permitting.
13. DO NOT DELAY IMMEDIATE TRANSFER!

Reference:
http://www.sjtrem.com/content/20/1/24

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