

DIRECT BRAIN COOLING THERAPY FOR SEVERE HEAD INJURY

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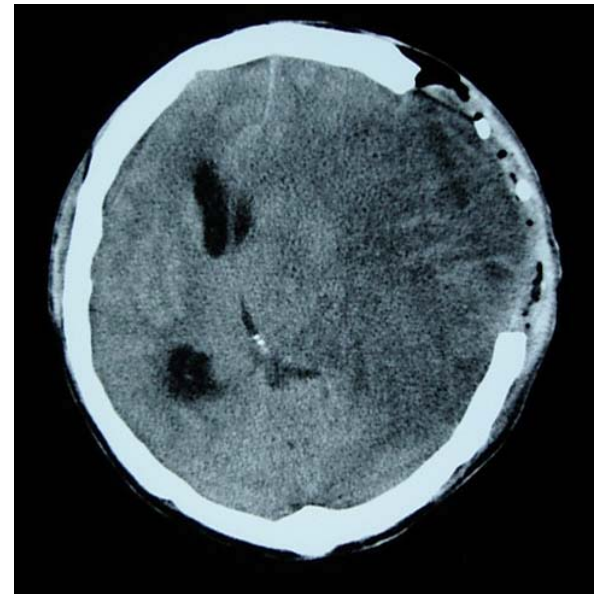
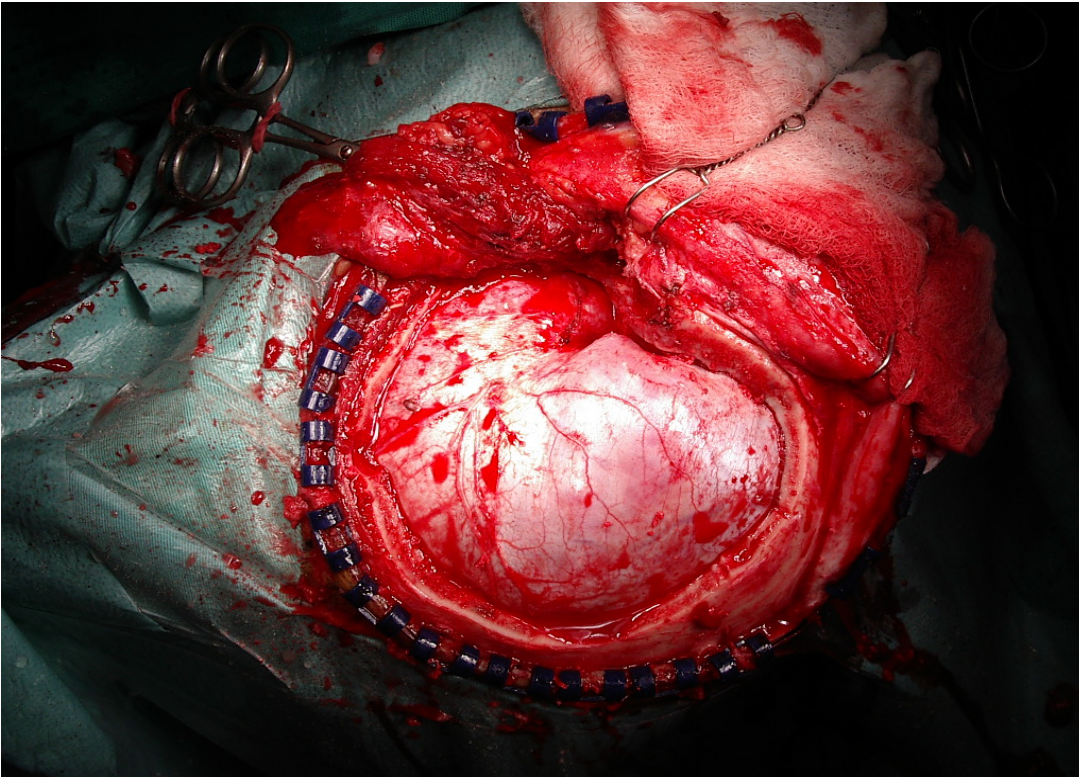
COOLING THERAPY SO FAR

- ? EFFECTIVENESS – Some said yes/some said no
- No – maybe because of methods = **indirect brain cooling** = They cool the whole body = systemic cooling which has SIDE EFFECTS:
 1. DVT
 2. CARDIOPULMONARY DEPRESSION
 3. PNEUMONIA etc

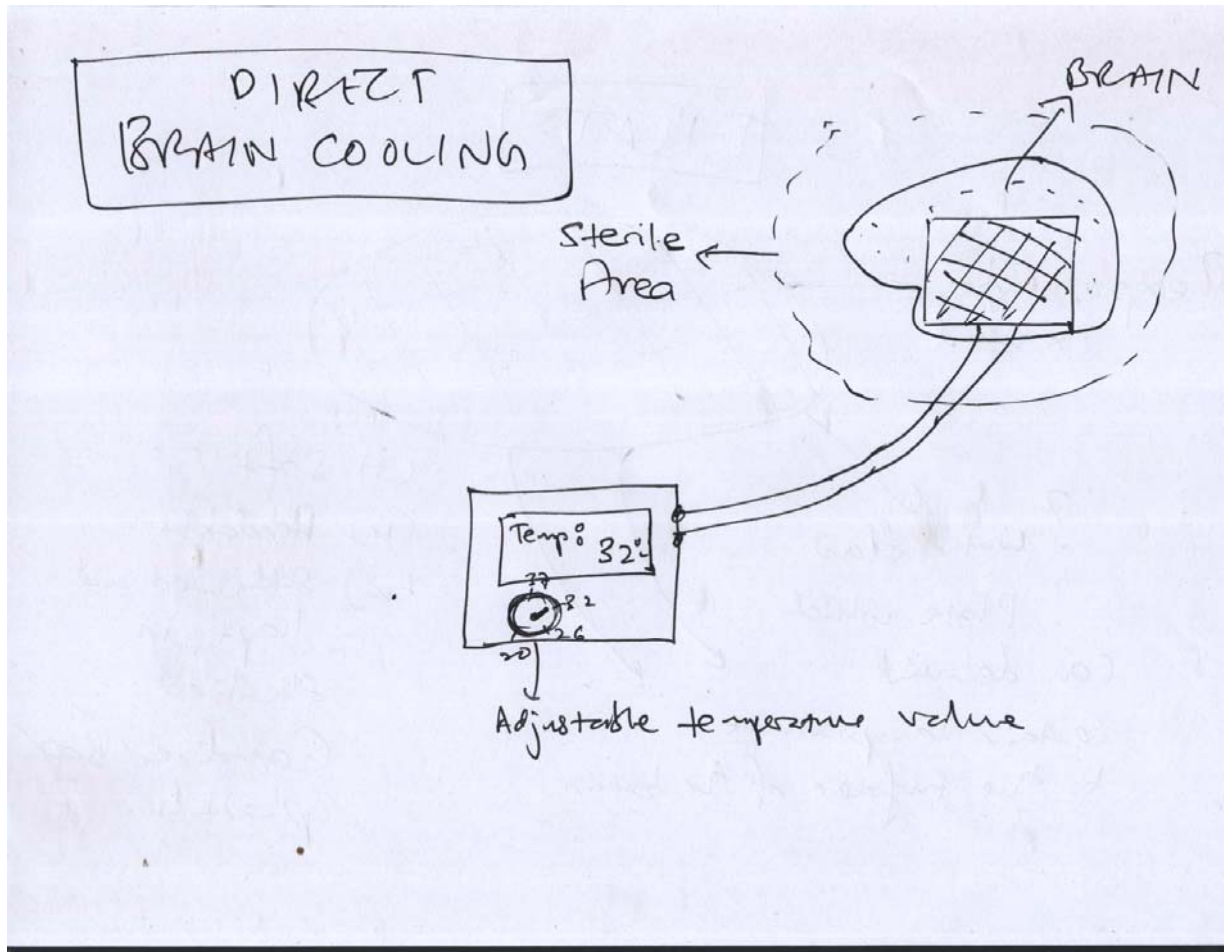
Latest USA study

- Cooling with helmet = found ineffective { no different in outcome}
- This is a new idea = DIRECT BRAIN COOLING WITH ADJUSTABLE TEMPERATURE

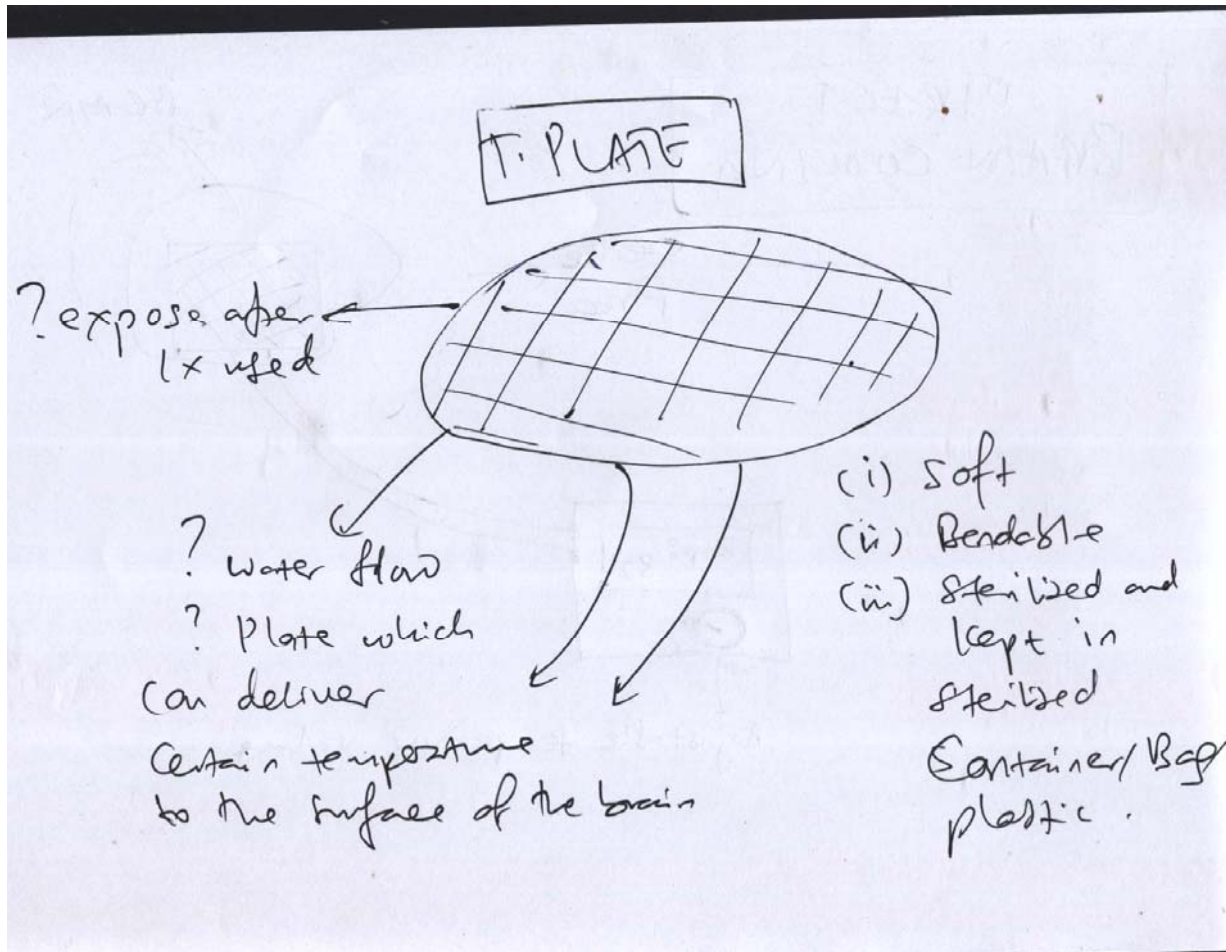
Surgery for head injury



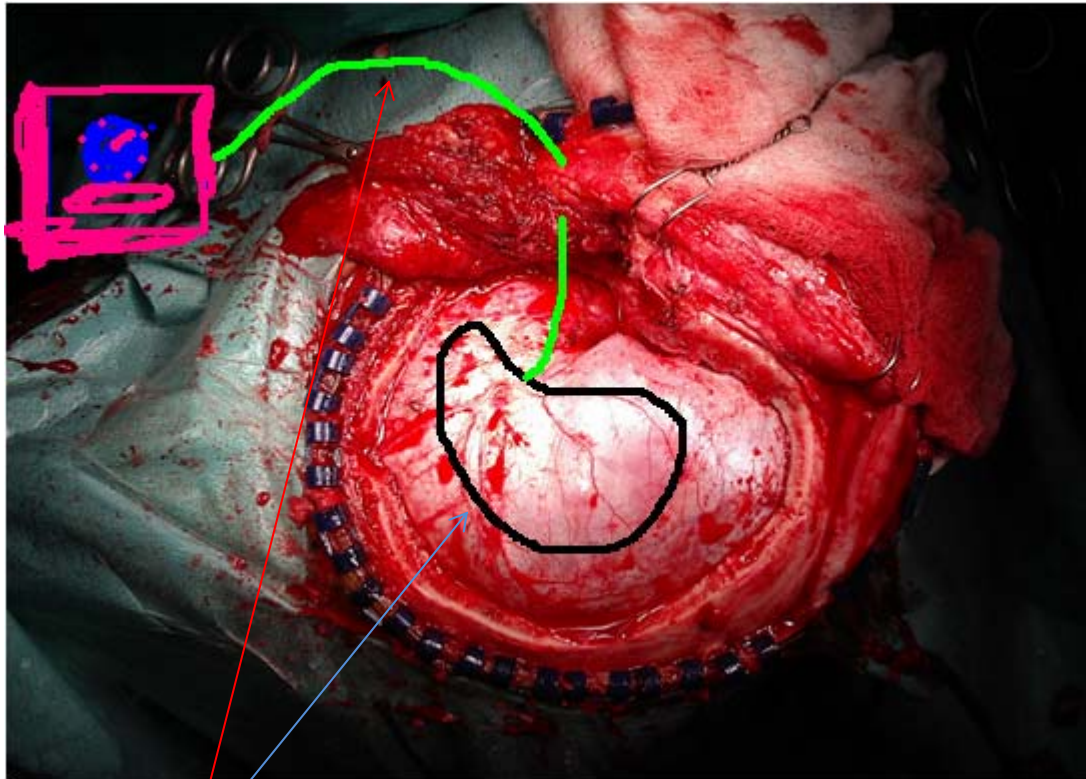
The proposed system



System in details

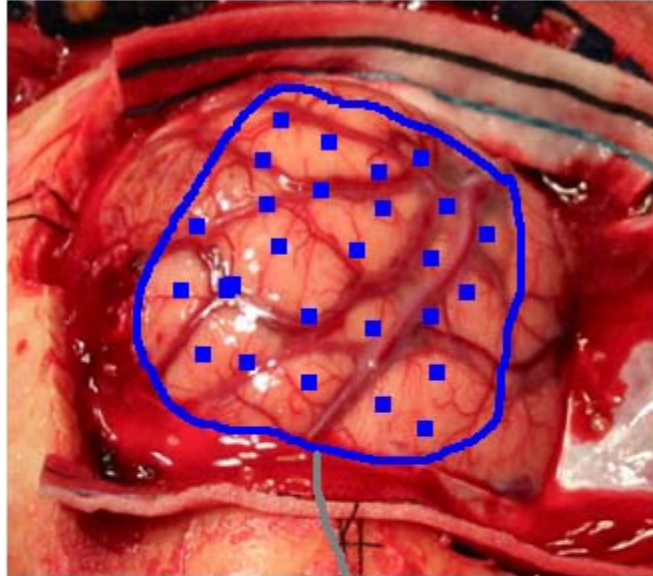


The system



STERILE ITEMS

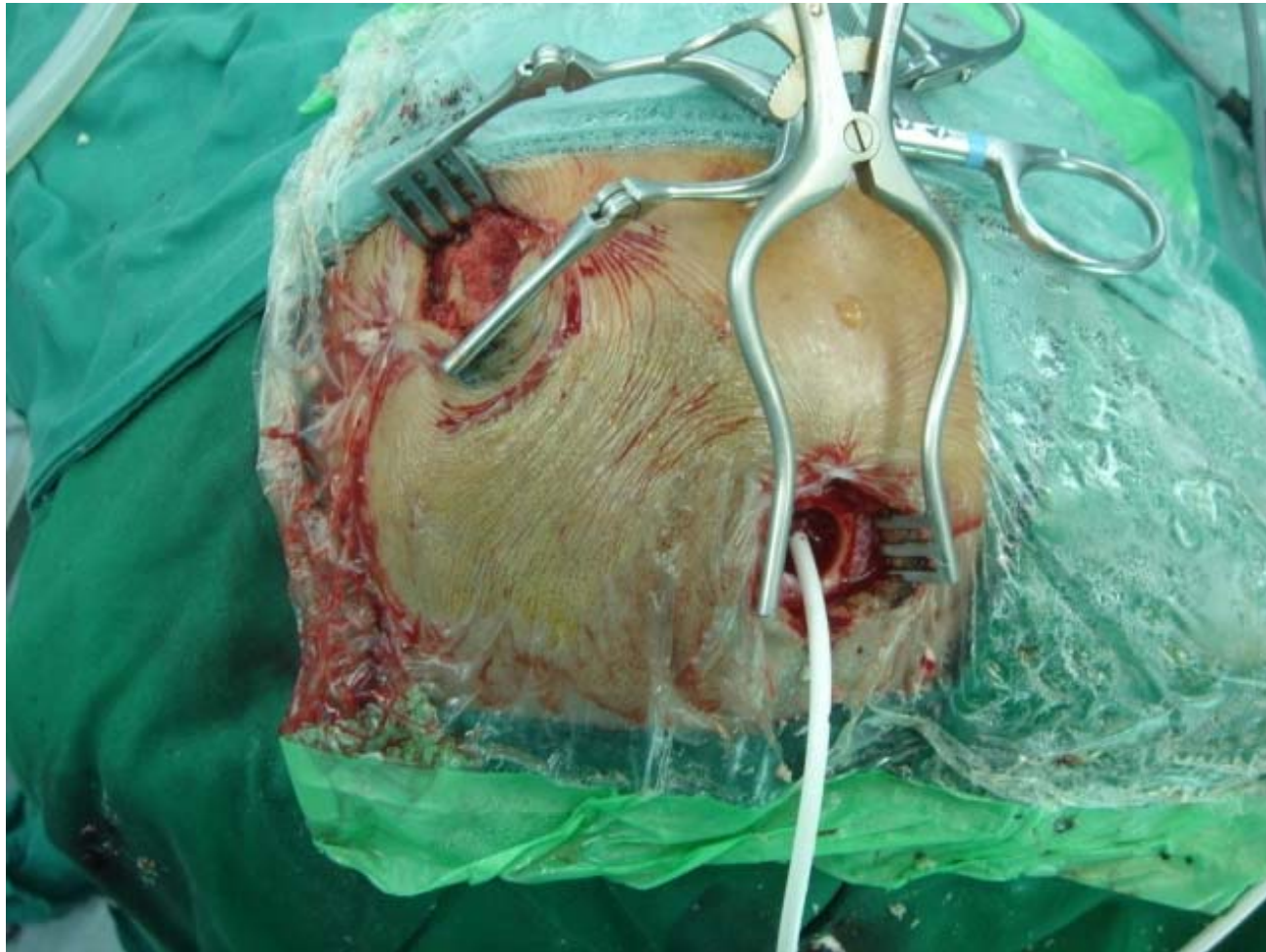
THE SYSTEM DIRECT ON SURFACE OF BRAIN - BETTER



Problem

- Have to do second surgery to remove the plate????

OR? If possible



SMALL OPENING with probe which gives external cold effect

