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

- T. Plate
- Water flow
- Plate which can deliver certain temperature to the surface of the brain
- Exposure after 1x used

(i) Soft
(ii) Bendable
(iii) Sterilized and kept in sterilized container/bag plastic.
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