

CODE: N5

Question: Neuroanesthesia

Type:

Author: Dr. B. Sischek**Opening Scenario:**

- 24 y.o. male delivery person steps backward off truck lift striking his head mid-morning
- diagnosed in emerg with acute subdural
 - decreased level of consciousness
 - arrives in O.R. unintubated and since CT scan has blown a pupil

Major points of additional information to be provided to the candidate, e.g., hx, px, labs, x-ray, consults:

CT shows moderate size subdural booked as emergent craniotomy - neurologic deterioration steady since leaving emergency. Previously healthy. BP 190/110 HR 50. Responds only to pain.

Major decision points (major decision points or options which must be recognized by the candidate)

- neuro-resuscitation/induction - consider other injuries (including C-supine) - what monitors?
- ?Lidocaine, pros/cons of narcotic at induction
- *full stomach hazard - (is succinylcholine indicated with \uparrow ICP how well pre-oxygenated if not following commands)?
- ?C-spine precautions with head injury and possibility of associated other injuries

Any followup information required to lead to the end of the question

- despite full stomach precautions, particulate aspiration occurs at induction - wheezing R lung field
- progressive increased airway pressures
- CO₂ on capnometer decreased but ICP up - Intra-Op - Brain Bulging - Diff Dx and Rx
- ET CO₂ may not reflect PaCO₂.

Critical features to be included i.e. the *must* have to pass the question or to be considered *completely unacceptable*

- remember full stomach
- proper neuro-induction - monitors
- management of aspiration:
 - suction \pm bronchoscopy
 - increased ventilation
 - additional neuro resusc to compensate - Mannitol/Lasix, head up, increase resp freq with smaller tidal volumes to decrease airway pressure
 - maintain ventilation post-op for minimum 24 hours to observe for aspiration pneumonitis
 - followup with CXR, etc. - Postop monitoring -ICP
 - must not cancel surgery with aspiration
 - must not extubate

Ref. RCEXAMAT EXAMS October, 95

Used: 94/06

Last revision: 95/10