CSF Analysis

General Heuristics for CSF Interpretation

| Diagnosis | WBC | Glucose | Protein | Opening Pressure | Other |
|----------------------|--|------------------------------|---------------------|---------------------|---|
| Fungal Meningitis | ↑ (lymphocytes) | ↓ (<60% serum glucose) | † | Variable | Fungal Cx |
| GBS | Normal | Normal | $\uparrow \uparrow$ | Normal | So-called "albumino- cytologic dissociation" |
| SAH | Normal (accounting for peripheral ratio of RBC to WBC) | Normal | 1 | Normal to ↑ | Xanthochromia = yellow appearance of CSF, suggests long-term presence of RBCs (to dx from traumatic tap) |

| Trach Troubleshooting | | | | | | |
|-------------------------|--|---|--|--|--|--|
| Tracheostomy Basics | | | | | | |
| Major types | | Shiley or Bivona (more flexible, better for active children) | | | | |
| Sizes | | A "3.0" trach has an inner diameter of 3.0 mm, sizes vary by age | | | | |
| Cuffed vs. Uncuffed | | Cuffs improve air seal, prevent aspiration , but uncuffed allows spontaneous breathing, improved vocalization, may be appropriate for infants and small children | | | | |
| Outer vs. Inner Cannula | | Outer cannula holds stoma open, inner cannula can be removed for cleaning | | | | |
| Fenestration | | Improves vocalization | | | | |
| Trach Ties | | The part that wraps around the neck to keep trach in place | | | | |
| Trach Complications | | | | | | |
| Plan ahead! | Differentiate new (< 7 days) vs. mature stoma (> 7 days) Know if your patient can be ventilated "from above" in event of trach malfunction Know your patient's trach brand, size, features and have replacement trach at bedside, including one size smaller | | | | | |
| Decannulation | Staff assist, call RT urgently If new stoma, do NOT blindly replace trach, call ORL | | | | | |
| Obstruction | • Mucous plugging → suction, replace inner cannula, etc. • Back-walling = Distal end of trach obstructs against posterior tracheal wall → call RT, reposition trach, may need longer trach • Tracheal stenosis or granulation tissue → call ORL, may need to be addressed surgically • Consider deflating cuff and ventilating "from above" if possible | | | | | |
| Bleeding | Although rare, have high index of suspicion for tracheo-arterial fistula, call ORL Differentiate blood from trach vs. from stoma/trach site | | | | | |