Appendix 6 – Instructions and check list for prone positioning

COMPLETE PRE AND POST PRONING CHECKLIST AND FILE THIS SHEET IN THE NOTES

Indications

Refractory hypoxaemia

ARDS with PaO2:FiO2 ratio of <20KPa with FiO2 > .6 (e.g. PaO2 < 12KPa with FiO2 .6)

Poor compliance with difficulty keeping peak pressure < 30cmH2O

Already paralysed and trial of higher PEEP/recruitment manoeuvres if appropriate

Contraindications

Absolute: open abdomen, unstable cervical spine injury

Relative: cardiovascular instability, pregnancy, head/facial/eye/thoraco-lumbar spine/pelvic trauma, morbid obesity

Before procedure

- Inform family if possible
- Assemble team: 1 doctor to manage airway, 4 others at least to perform turn
- Eye care: tape eyes, gauze pad
- Ensure ETT secure, note length at teeth
- Aspirate NG tube, ensure length at nose documented and disconnect feed
- Lines: disconnect non-essential lines, ensure adequate length for those still running
- Consider whether a vascath should be inserted before turning
- Move haemofilter if running to position so that turn can be made
- Pad and position any drains for turn
- Pre-oxygenate with 100% oxygen if not on already
- Ensure deeply sedated and paralyse if not already receiving infusion of neuromuscular blocking drug
- Locate at least two pillows

Turning to the prone position

- Ensure team present as above, may need more if patient obese
- Team to be briefed on planned technique
- Place slide sheet under patient (under sheet below patient)
- Place arms by side
- Remove ECG electrodes from chest
- Put one pillow over chest, other over pelvis
- Put second sheet over patient, put edges together and roll up tightly together - the ‘pasty’
- Airway doctor securely keeps hold of endotracheal tube and head
- Turn towards the ventilator if possible
- On the count of the airway doctor slide the patient to the edge of the bed - usually away from the ventilator
- Then slowly role the patient over onto their front - usually towards the ventilator - usually whole movement of sliding then rolling in one count but to be clarified by airway doctor before turn
- Keep endotracheal tube connected to ventilator during turn if possible to prevent derecruitment
- Monitor capnography trace throughout - keep saturation probe and arterial monitoring on during procedure if possible
- Ensure pillows in acceptable position under chest with chin free and under pelvis leaving abdomen free between pillows
- It is acceptable to turn with no pillows in place and lift the patient when prone to place the pillows if preferred

Patient details/sticker
Name

Date of birth

Hospital number

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Immediately after turning

- Replace ECG electrodes on back
- The patient should be moved so that the ankles are at the bottom of the mattress and the foot is hanging off so it is not excessively plantar flexed
- Alternatively a further pillow should be placed under the shins for the same effect
- One arm should be 'swum' above the head with the shoulder ensured to be abducted to less than 90 degrees
- The head should be turned towards the side the arm is swum
- Ensure eyes not compressed by bed and facial tissues not being compressed by any lines/equipment
- Reverse Trendelenberg, slight head up
- Can restart NG feed - check NG length at nose has not moved

Maintaining the prone position

- Assess response, aim to see oxygenation improving, lung recruitment and improved compliance
- Monitor for pressure on eyes
- Swim each arm and put the other back down by the side every 2-4 hours
- Move the head to face the raised arm at the same time
- Aim to keep prone for 16 hours - may be longer or shorter at discretion of ICU consultant
- To turn the patient supine do the reverse of the process described

Emergency Situations

- **Airway displacement**
  - Call for help, (4444 anaesthetic emergency team if needed)
  - Turn the patient supine as quickly as possible
  - Reintubate or replace tracheostomy
- **Cardiac arrest**
  - Call for help, commence CPR (+/- defibrillation) in prone position
  - When enough team present, turn supine and continue CPR

Pre-proning checklist (tick each item)

- ☐ Appropriate team assembled
- ☐ Pre-oxygenated to 100%
- ☐ Airway trolley and equipment available
- ☐ Airway well secured, ETT length at teeth noted
- ☐ Tape and gauze to eyes
- ☐ Consider whether vascath or extra access needed before turn
- ☐ Non-essential infusion lines removed
- ☐ Remaining with adequate length and haemofilter positioned appropriately
- ☐ ECG electrodes and unnecessary monitoring removed
- ☐ Catheter between legs and bag at bottom of bed
- ☐ Any chest drains positioned for turn (clamped only at discretion of senior doctor)
- ☐ Any surgical drains/stomas padded and positioned appropriately
- ☐ NG feed disconnected, aspirated and length of tube noted at nose
- ☐ Patient adequately sedated and paralysed

Checklist complete signature..

Post-proning checklist (tick each item)

- ☐ Airway secure, capnography trace still present, ETT not kinked, still at same length
- ☐ All monitoring in place and functioning
- ☐ No pressure on eyes
- ☐ No pressure on face from ETT or central line
- ☐ Pillows in appropriate places, abdomen hanging free
- ☐ Neck free from compression in good position
- ☐ One arm in raised in swimming position, shoulder abducted less than 90 degrees
- ☐ Head facing raised arm
- ☐ NG still in same position
- ☐ Catheter and male external genitalia between legs
- ☐ Feet not excessively plantar flexed hanging off end of bed or with pillow under shins
- ☐ Leads and wires not underneath patient
- ☐ Bed reverse Trendelenberg slightly head up

Checklist complete signature..

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