

## Skin and pressure area care in prone position in critically ill patients

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**Issued To:-**

To all staff

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**REVIEWED**

November 2019

**This Protocol/Guideline was approved by the Matron of the Adult Intensive Care Services**

**On:-**

"[Click and Type <DATE> Here]"

**Signed:-**

"[Click and Type <NAME> Here]"

Review Date	Result of Review	Summary of amendments	Distributed to	By
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## Introduction:-

Prone position can be associated with many complications. In those patients with severe hypoxemia, the benefits of prone positioning often outweigh the potential risks. The risk of developing pressure ulcers is ever-present, as the patient is immobile and pressure on bony prominences may be prolonged. Pressure will be placed on different structures in the prone position than in supine, specifically on the chest, cheeks, forehead, chin and nose.

Patient in the prone position will often experience increased oedema of the face (eyes, lips and tongue). Pressure on the face in prone position is on average 30 mmHg, but can be higher than 50 mmHg in certain areas such as the chin and forehead above the supraorbital ridge. Prolonged pressure on ears, particularly on cartilaginous auricles can result in hematoma, chondritis, ischemia or necrosis.

Nurses should be aware of the potential complications when caring for a patient in prone position, to anticipate and prevent these occurrences. Several key care elements should be instituted to ensure patient safety.

## Scope:-

This is a guideline to support clinical practice on the Adult ICU (AICU) and Churchill ICU (CICU), Oxford University Hospitals Trust.

## Aim:-

Prevent potential pressure ulcer development

## Definitions:-

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## Responsibilities:-

Nursing/Medical staff & physiotherapists

## Guideline Content :-

Line Care

Eye care

Adult Intensive Care Units

Pressure area care

Action	Rationale
Clean eyes with sterile water and apply Simple eye ointment. Close eyes and gently cover with gauze and secure with tape.	Eye ointment will keep eyes moist for longer period. To prevent developing of chemosis, corneal abrasion, ischaemic optic neuropathy and central retinal thrombosis.
Check skin around naso-gastric tube (NGT) and reposition NGT. NASO-FIX NGT fixation or Hammock technique to be used to secure NGT.  Hollister NGT holder not to be used.	To prevent developing of mucosal pressure damage.  Plastic part would cause pressure damage.
Suction patient's mouth, brush patient's teeth and apply white tape with pink sponges to secure ET tube. . (please, see photo)  Anchor Hollister ET tube holder not to be used.	When patient is prone for longer period of time access for effective mouth care is limited.  Plastic part would cause pressure damage.
Apply gauze swab 7.5x7.5 cm under the ETT tape to lip corners. (please ,see photo)	To prevent developing of mucosal pressure damage and to absorb saliva.
All lines to be wrapped in gauze swab	To prevent developing of medical device related pressure ulcers
Make sure all wounds to the front part of the body are checked and redressed prior patient is prone.	To make sure all wounds are clean and healthy and there are no complications (dehiscence, infection, etc...)
Remove ECG dots from chest and place them on patient's back.	To prevent development of pressure ulcers to chest.
Reposition patients head every 2 hours and avoid pressure on the eyes.	To prevent development of pressure ulcers and facial injury (for example supraorbital nerve compression).
Vary the prone position every 2 hours – eg rotating through positions A,B,C, (please, see photo in the appendix)	To prevent development od pressure ulcers, brachial plexus injury, shoulder extension injury and specific nerve injury.
Position Neck to neutral position and do not support with more than one pillow.	To avoid laryngeal cartilage compression and vascular compression. To avoid hyper-extension of the neck.

Adult Intensive Care Units

Do not use gel pads or any type of cushions.	To avoid skin damage. Due to fluid shift and increase swelling to facial area additional padding will cause marking to the skin.
Position patients upper limbs in the "crawl" position and change position 2 hourly	To prevent Brachial plexus injury Shoulder extension injury Specific nerve injury
Place a pillow across the pelvis and in male subjects, the genitalia should be positioned between the legs.	To prevent developing of pressure ulcers To prevent developing of genital ischemia necrosis.
Keep hips and knees in slight flexion for 2 hours and then reposition legs with pillows for another 2 hours.	To prevent developing of pressure ulcers To prevent hip extension, foot drop and peroneal nerve palsy.

**Review :-**

"[Click and Type <<Review>> Here]"

**References:-**

1. Guerin C.,Reignier JC., et al. Prone positioning on Severe Acute Respiratory Distress Syndrome. N Engl J Med 2013
2. Ross P.Smurthwaite G., A Practical Guide to the Prone Position for Surgery, 2<sup>nd</sup> Edition
3. H. Edgcombe, K. Carter, and S. Yarrow, "Anaesthesia in the prone position," British Journal of Anaesthesia, vol. 100, no. 2, 2008.
4. P. J. Offner, J. B. Haenel, E. E. Moore, W. L. Biffi, R. J. Franciose, and J. M. Burch, "Complications of prone ventilation in patients with multisystem trauma with fulminant acute Respiratory distress syndrome," The Journal of Trauma, vol. 48, no. 2, 2000

**Equality Impact Assessment :-**

## Adult Intensive Care Units

As part of its development, this document has been reviewed for its impact on equality. No issues were identified.

### Appendix:-

Vary the prone position every 2 hours – e.g. rotating through positions A, B,C,

A)



B)



C)

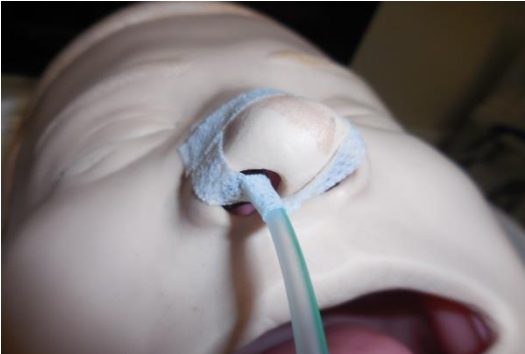


Adult Intensive Care Units

Prevention of a facial pressure damage.



Hammock technique for securing nasogastric tube.



Naso-Fix NGT securing devices



Adult Intensive Care Units