

TALC SLURRY PLEURODESIS

INDICATIONS

This intervention will be performed for patients with pneumothoraces who are unsuitable for surgery or who decline surgery, patients with recurring pleural effusions and following thoracic surgery for patients who experience prolonged air leaks from the intercostal chest drain.

COMPLICATIONS AND RECOMMENDED ACTION

<u>Pain</u>	To provide adequate analgesia at least 30 minutes prior to the procedure (oramorph 5-10mg). To observe for pain post procedure and to administer adjuvant analgesia if necessary.
<u>Pyrexia</u>	Pyrexia is a normal reaction to this procedure as the aim is to cause an inflammatory process in the aim of promoting adhesion of the pleura, one of the signs of inflammation is heat. Observe for and treat if hyper-pyrexia develops.
<u>Dyspnoea</u>	If the procedure is performed with the chest drain clamped; observe for signs of a tension pneumothorax: dyspnoea, pain, arrhythmias, hypotension and tracheal deviation. If a tension pneumothorax is suspected, unclamp the intercostal chest drain and inform senior staff. Provide reassurance to the patient and assist with deep breathing exercises to reduce anxiety.

Equipment

- Sterile bowl
- Dressing pack
- Chest drain clamp
- 50ml bladder syringe

Slurry solution

- Local anaesthetic agent (3 mg/kg; maximum 250 mg)
- (10mls lignocaine 2%)
- 4 grams of sterile talc in 50mls 0.9% saline

Ref: Thorax 2010;65(Suppl 2):ii32-ii40.

Procedure

A: Clamped drain procedure

(Performed if there is absence of an air leak or a small-moderate air leak during expiration only)

- Inform the patient regarding the procedure: what you will do, what to expect, rotation every 15 minutes for 1 hour, signs to observe i.e. pain, dyspnoea and inform to ring the nursing staff. **Obtain written consent.**
- Prepare the patient in a 45-degree angle
- Mix talc and saline into a slurry.
- Clamp the intercostal chest drain and disconnect the tubing.
- Instill the local anaesthetic immediately prior to the talc slurry solution via the intercostal chest drain under aseptic technique.
- Instil the slurry via the intercostal chest drain under aseptic technique.
- Clamp the chest drain with the talc instilled intrapleurally and begin rotation: supine, left lateral, right lateral and prone.
- After rotation, re-attach the drain tubing and recommence low grade continuous thoracic suction for 24 hours then review.

B: Unclamped drain procedure

(Performed when there is a large air leak during the full respiratory cycle)

- Inform the patient regarding the procedure: what you will do, what to expect, rotation every 15 minutes for 1 hour, signs to observe i.e. pain, dyspnoea and inform to ring the nursing staff. **Obtain written consent.**
- Prepare the patient in a 45-degree angle
- Mix talc and saline into a slurry.

- Clamp the intercostal chest drain and disconnect the tubing.
- Instill the local anaesthetic immediately prior to the talc slurry solution via the intercostal chest drain under aseptic technique.
- Instil the slurry via the intercostal chest drain under aseptic technique..
- Attach a long length of chest drain tubing and place over a drip stand utilising gravity to prevent the talc draining out.
- With the talc instilled intrapleurally and begin rotation: supine, left lateral, right lateral and prone.
- This technique allows for suction to be present throughout the procedure, and allows for air exit thus reducing the potential of tension pneumothorax.

Information for patients

Refer to patient information leaflet.

Aim of procedure.

How it works i.e. inflammatory process.

Need for rotation.

Need for analgesia and pain relief in order to rotate and perform lung expansion.

Signs to observe during procedure (pain, dyspnoea).

Signs to observe following procedure (pain, dyspnoea, pyrexia).

Information for staff

See information for patients.

Address any queries

Signs to observe following procedure (pain, dyspnoea, pyrexia).

Reviewed by Leanne Connelly Feb. 2011