TRIAL SPECIFIC PROCEDURE
FOR
TAPPS

TSP TAPPS 01.01
DRAIN INSERTION AND SLURRY INSTILLATION

Effective date: 10\textsuperscript{th} Oct 2012

<table>
<thead>
<tr>
<th>Authored by</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr Rahul Bhatnagar</td>
<td>Clinical Research Fellow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reviewed by</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natalie Zahan</td>
<td>Research Nurse</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Authorised by</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr Nick Maskell</td>
<td>Consultant and Senior Lecturer in Respiratory Medicine</td>
</tr>
</tbody>
</table>

Signature

Date 10/10/12
1 INTRODUCTION AND SCOPE

The purpose of the Trial Specific Procedure is to describe the procedures relating to drain insertion and slurry instillation for the purpose of the TAPPS study. It applies to researchers taking part in the TAPPS study and performing the above procedures as per protocol and the delegation log.

2 DEFINITIONS

There are no definitions for this TSP.

3 PROCEDURE

3.1 Drain insertion

1. Procedure ideally to be performed in dedicated clean environment (e.g. theatre, procedure room, etc.).
2. Explain procedure.
3. Obtain written consent for Seldinger drain insertion.
4. Position patient and administer sedation as necessary.
5. Perform thoracic ultrasound to confirm safe site for drain insertion.
6. Prepare kit, including filling drainage bottle to pre-marked prime line.
7. Don sterile gown and gloves, and sterilise insertion site using appropriate skin preparation.
8. Infiltrate local anaesthetic to skin and down to pleura.
10. Attach the provided 3-way adaptor to the drain, and screw in the tubing adaptor.
11. Secure to the skin.
12. Apply a small amount of gauze padding around the drain insertion site to prevent discomfort.
13. Fix to the skin using clear dressings. The insertion site should ideally be visible.
14. Attach the drain to the underwater seal using the sterile tubing provided.
15. Fully document procedure and drainage plan in patient notes.
16. Ensure the patient is prescribed adequate analgesia, and intrapleural flushes to maintain drain patency (20mls 0.9% saline three times daily).
17. Observations, including drainage volumes, should be performed at least every hour for the two hours post-insertion, reverting to standard frequency if there are no significant complications.
18. A chest x-ray should be performed to ensure adequate positioning.
3.2 Drainage plan

1. Clamp / close the drain once 1000mls is reached, or if the patient experiences distress during drainage, or once one hour has passed post-insertion.
2. Ensure the drain is clamped / closed for a minimum of 1 hour before further drainage is allowed.
3. Drainage volumes are to be charted at least every 8 hours for the duration of drain use.

3.3 Talc slurry pleurodesis

1. Procedure may be performed at the patient’s bedside as long as aseptic technique is maintained.
2. Explain procedure.
3. Administer pre-medication (e.g. 10mg oral morphine solution).
4. Position the patient comfortably, allowing access to the drain.
5. Expose the 3-way tap.
6. Clean the access port using an alcohol-based swab.
7. Instil 10mls of sterile 0.9% saline into the pleural cavity via the 3-way tap, to ensure drain patency.
8. Instil 3mg/kg (maximum 250mg) of 1% lidocaine in to the pleural space via the 3-way tap.
9. Turn the tap off to the drain (clamp) for 10 minutes.
10. Make up 4 grams of sterile talc to a slurry using 50mls of 0.9% sterile saline.
11. Instil the slurry into the pleural cavity via the 3-way tap at least 10 minutes after lidocaine instillation.
12. Flush 20mls of 0.9% saline into the pleural cavity via the 3-way tap.
13. Turn the tap off to the drain (clamp) for 2 hours.
14. Re-open the 3-way tap to both the drain and the drainage bottle.
15. Apply thoracic suction (-10 to -20cmH₂O) for at least 24 hours.
16. Ensure the patient is prescribed adequate analgesia.
17. Observations should be performed every 15 minutes for the first hour post-talc, then hourly for the next 3 hours, before reverting to standard frequency if there are no significant complications.
18. A chest x-ray should be performed between 18 and 24 hours post talc instillation.

3.4 Post-pleurodesis

1. Drains should remain in place for at least 24 hours post talc slurry instillation.
2. Drainage volumes should continue to be recorded at least every 8 hours.
3. Once drainage volumes fall below 250mls in the preceding 24h hours the drain may be removed.
4. A PA chest x-ray should be performed prior to the patient being discharged home.
4 ASSOCIATED FORMS
There are no forms associated with this TSP.

5 REVISION HISTORY

<table>
<thead>
<tr>
<th>SOP No</th>
<th>Effective date</th>
<th>Revision summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.01</td>
<td>10/Oct/2012</td>
<td>New TSP</td>
</tr>
</tbody>
</table>

6 APPENDICES
There are no appendices for this TSP.