Spontaneous pneumothorax protocol

CLINICAL DECISION UNIT PROTOCOL

Spontaneous Pneumothorax

Patient Details/Addressograph

CDU ARRIVAL DATE.....TIME........
A&E ARRIVAL DATE.....TIME........

Inclusion Criteria
♦ Patient treated with needle aspiration for treatment of spontaneous primary or secondary pneumothorax
OR
♦ Patient with small pneumothorax not requiring aspiration or chest drain, who requires observation to rule out progression of pneumothorax
AND
♦ Normal vital signs

Exclusion Criteria
♦ Patients with blunt or penetrating chest trauma
♦ Hypoxia (O$_2$ saturation of < 93 % on room air)
♦ Any trauma requiring surgical intervention or hospitalisation
♦ Presence of haemothorax or haemopneumothorax
♦ Abnormal vital signs
  ♦ Temp > 38°C
  ♦ Pulse > 120
  ♦ RR > 30
  ♦ Systolic BP > 180 or < 90
  ♦ Diastolic BP > 110
Spontaneous pneumothorax protocol

Presenting Complaint

- Breathlessness
- Chest Pain
- Onset Time Activity
- Duration
- Cough

- Wheeze
- Sputum
- Haemoptysis

Past Medical History

- Previous Respiratory Disease
  - Details

⇒ Protocol for PRIMARY / SECONDARY pneumothorax (*Delete*)

- Previous pneumothorax
  - Date:
  - How managed
    - Aspiration / Chest drain / Pleurodesis

Other illness

Medication

- ?Warfarin

Smoking History
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**Examination**
Management Algorithm 1

Primary Pneumothorax

Breathless and/or rim of air > 2cm on chest x-ray?

YES

Aspiration

Successful?

NO

Consider repeat aspiration

SUCCESSFUL?

YES

NO

Intercostal drain

SUCCESSFUL?

YES

Remove 24 hrs after re-expansion / cessation of air leak without clamping

NO

Refer to chest physician within 48 hrs. ?Suction

Referral to thoracic surgeon after 5 days

Consult discharge
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Management Algorithm 2

Secondary Pneumothorax

Age > 50 years + Breathless + rim of air > 2cm on CXR?

YES

Intercostal drain

NO

Aspiration

Successful?

YES

Admit to hospital for 24 hours

NO

Successful?

YES

Remove 24 hrs after re-expansion / cessation of air leak without clamping

NO

Successful?

YES

Early discussion with surgeon after three days

NO

Consider discharge

Referral to chest physician after 48 hrs ?suction
Spontaneous pneumothorax protocol

Investigations

All Patients
1. CXR
2. Pulse Oximetry

Selected Patients
1. FBC
2. Electrolytes
3. Coag screen / INR
4. X-rays as indicated for evaluation of associated trauma
5. Post-aspiration CXR (for all patients with needle aspiration carried out)
6. Second Post-aspiration CXR if first CXR reveals residual pneumothorax (done after re-aspiration)
7. Surgical or thoracic surgery consultation
Spontaneous pneumothorax protocol

Multidisciplinary Notes

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<tr>
<th>Date/time</th>
<th>Initials</th>
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Spontaneous pneumothorax protocol

Discharge Arrangements

**Discharge Criteria**
1. No residual pneumothorax
2. Adequate analgesia on oral medication
3. Normal vital signs
4. No bleeding

If patient:
- Develops re-accumulation of pneumothorax
  OR
- Develops haemothorax
  OR
- Requires further catheter aspiration
  OR
- Requires chest drain

THEN
- Admit to Medicine

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<tr>
<th>Referred to</th>
<th>Discharged Home</th>
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<td>Referral Time</td>
<td>Discharge Time</td>
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<td>Decision Time</td>
<td>OP Follow-up</td>
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<td>Transfer Time</td>
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GP Letter       Y/N  ......................(SIGN)
Discharge Medication Y/N  ......................(SIGN)
Discharge Advice Letter Y/N  ......................(SIGN)

CDU Discharge Instructions

Discharge instructions for patients with Spontaneous Pneumothorax

You have been treated on the Clinical Decision Unit of the A&E Department, Hairmyres Hospital, for a pneumothorax (free air around the lung).
Your consultant has been

Dr O’Connor  Dr Keaney  Dr McGuire  Dr Cash

There have been no signs of complications and you are now ready for discharge.

Discharge medication
• Simple analgesics
• Antibiotics as needed

What you can expect
• Wound care instructions
• Follow-up appointment in 1-2 weeks

Common symptoms

Indications to return
• Recurrence of pain
• Increasing breathlessness
• Increased cough

A letter will be sent to your GP regarding your observation and care in the CDU

In case you need advice, you can telephone:

A&E number : 
NHS 24 : 
Or contact your GP :