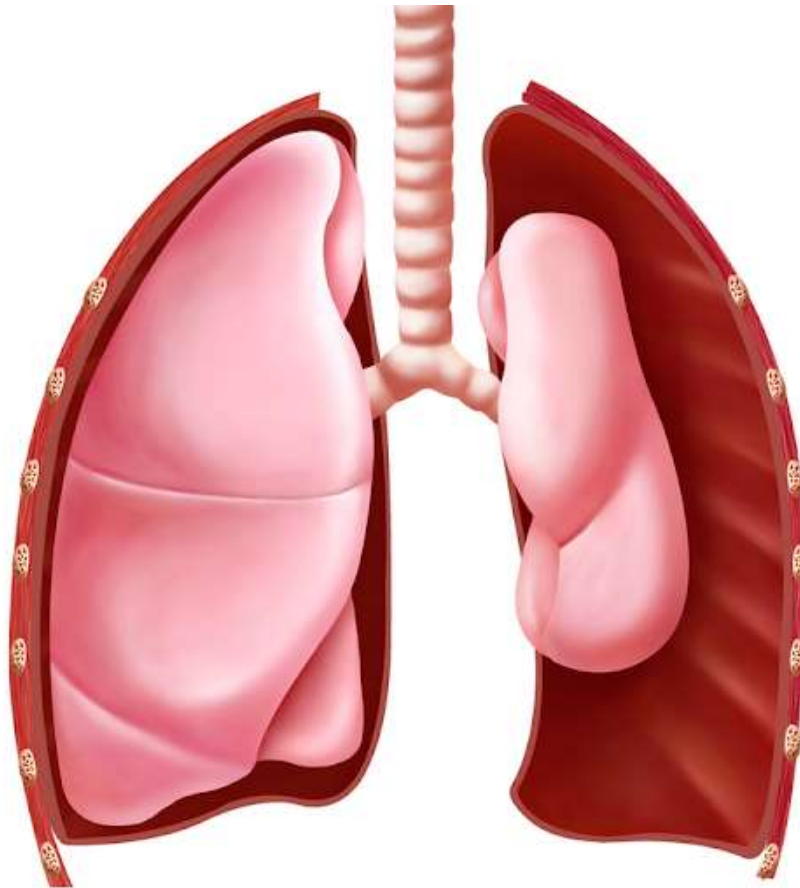




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Management of Patients with Spontaneous Pneumothorax



To deliver intelligent and holistic medicine and to provide the best healthcare
Compassion Quality Innovation Accountability

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I. Disease profile :

Pneumothorax occurs when air accumulates in the pleural cavity and squeezes the lungs, causing the lungs to collapse and affect breathing.

Spontaneous pneumothorax is divided into primary (primary) and secondary (secondary):

	Primary Spontaneous Pneumothorax	Secondary Spontaneous Pneumothorax
Cause	<ul style="list-style-type: none">➤ Occurs in good lung tissue without other lung diseases.➤ Due to abnormal air bubbles at the top of the lungs (may be related to alveolar rupture, genetics or family history).	<ul style="list-style-type: none">➤ It is more likely to occur in people with other lung lesions.➤ The lung tissue is fragile due to lung disease, and the alveoli cannot be expelled smoothly.
Risk factors	Smokers, young people (15-30 years old), tall and thin people (higher proportion of males).	Lung diseases such as tuberculosis, asthma, chronic obstructive pulmonary disease

II. Symptoms :

1. Sudden sharp pain in the front chest, sometimes radiating pain in the shoulder, chest tightness, and cough.
2. Half of the patients' experience increased breathing rate, difficulty breathing, or shortness of breath.
3. It may be due to insufficient ventilation, resulting in hypoxia,

general fatigue, weakness or shock, and even death in severe cases.

III. Frequently occurring state of activity :

1. Rest state.
2. Cough
3. Lifting heavy objects.
4. Movement.

IV. Treatment & care considerations :

1. Treatment
 - (a) Supplemental Oxygen: Most patients with spontaneous pneumothorax will feel better after receiving oxygen therapy.
 - (b) Inserting drainage tube or chest tube: When the area of the pneumothorax is greater than 15% to 20%, or when dyspnea has occurred, the physician will place a chest tube to facilitate the discharge of gas from the pleural cavity, promote lung expansion, and relieve symptoms of dyspnea.
 - (c) Surgery: When there is no improvement after placing a chest tube, and hemothorax or tension pneumothorax occurs, surgical treatment, such as thoracoscopy or traditional thoracotomy, partial apex resection is required to reduce the recurrence rate of pneumothorax from 30% to 5%.
 - (d) Pleural adhesion: Pneumothorax recurrence can be reduced by installing specific drugs into the pleural cavity through the chest tube to inflame and clarify the pleura and cause adhesions.
2. Post-op wound care

After thoracic surgery, the wound will be covered with gauze and

reinforced adhesive skin closure (the wound is not exposed). Please change the dressing according to the instructions in the "Wound Care Instructions for Discharged Thoracic Surgery" health education leaflet, and observe the wound daily for redness, swelling, heat, pain, and exudation.

V. Daily life precautions :

1. Avoid Precautions :

- (a) Patients with pneumothorax should pay attention to avoid activities with large changes in air pressure, such as diving, scuba diving, skydiving, etc.
- (b) Do not smoke, avoid secondhand smoke and exposure to air pollution.
- (c) Avoid strenuous exercise within one month after the operation, such as weightlifting, playing basketball, football, climbing mountains, etc.

2. Do deep-breathing exercises:

After inhaling slowly until you can't breathe, hold the breath for more than 3 seconds, and then slowly exhale the air in your chest.

- 3. Maintain a regular life, eat a balanced diet, maintain optimal nutritional status, and do not get too tired..
- 4. Spontaneous pneumothorax often occurs suddenly. When breathing difficulties and pain symptoms appear, please relax, do not panic, and accompany your family to the hospital as soon as possible.
- 5. If you have any questions after discharge, please feel free to return to the hospital for treatment.

VI. Conclusion

Patients prone to pneumothorax should maintain a balanced diet, regular life and exercise patterns, and avoid activities with large changes in air pressure and exposure to air pollution. When symptoms such as difficulty breathing and chest pain occur, it is important to go for immediate medical attention and treatment.

VII. Reference

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Let's take the quiz to make sure you understand

1. Pneumothorax is caused by the accumulation of gas in the pleural cavity and squeezing the lungs, causing the lungs to collapse and affecting breathing.

Yes No Don't know

2. Patients with pneumothorax should avoid activities with large changes in air pressure, such as diving, diving, skydiving, etc.

Yes No Don't know

3. There are no special restrictions on activities after surgery, and you can still do sports, such as weightlifting, playing basketball, football, climbing mountains, etc.

Yes No Don't know

4. Spontaneous pneumothorax often occurs suddenly. When symptoms of difficulty breathing and pain occur, please relax, do not panic, and be accompanied by your family to the hospital as soon as possible.

Yes No Don't know

5. For patients with a history of pneumothorax, it is important to maintain a balanced diet, a regular life, and exercise patterns.

Yes No Don't know