

## **Air in the chest cavity**

Pneumothorax occurs when air leaks into the area between the lungs and chest wall. As a result, the extra pressure in the chest cavity causes the lung to collapse resulting in chest pain and shortness of breath. If air continues to build up, the increasing pressure can compress both the lung and heart causing respiratory failure, cardiac arrest and shock. This is a life-threatening condition and requires immediate medical care.

The causes of pneumothorax include chest injury, certain medical treatments, lung disease or a break in an air blister on the lung's surface (primary spontaneous pneumothorax). Primary spontaneous pneumothorax usually occurs in healthy men, aged between 20 and 40, who are tall and thin.

Pneumothorax can be diagnosed through chest X-rays. A small pneumothorax may heal on its own in a week or two, but if the lung has collapsed more than 25 per cent, it is necessary to insert a chest tube into the chest cavity to remove the excess air. For larger or recurrent pneumothorax, surgical treatment may be needed to remove the air blister on the lung and to attach the lung surface to the chest wall.

Pneumothorax normally recurs within a year or two in about 50 per cent of people who had it before, especially when the first pneumothorax was small and had healed on its own. About 30 per cent of patients who have had primary spontaneous pneumothorax would develop a pneumothorax in the other unaffected lung.

Smoking is the major risk factor for primary spontaneous pneumothorax. So the best way to reduce the risk of having pneumothorax and its recurrence is to stop smoking.