

PMDA Medical Safety Information

Pharmaceuticals and Medical Devices Agency

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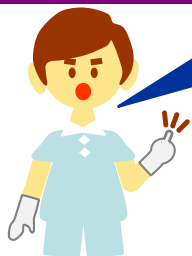
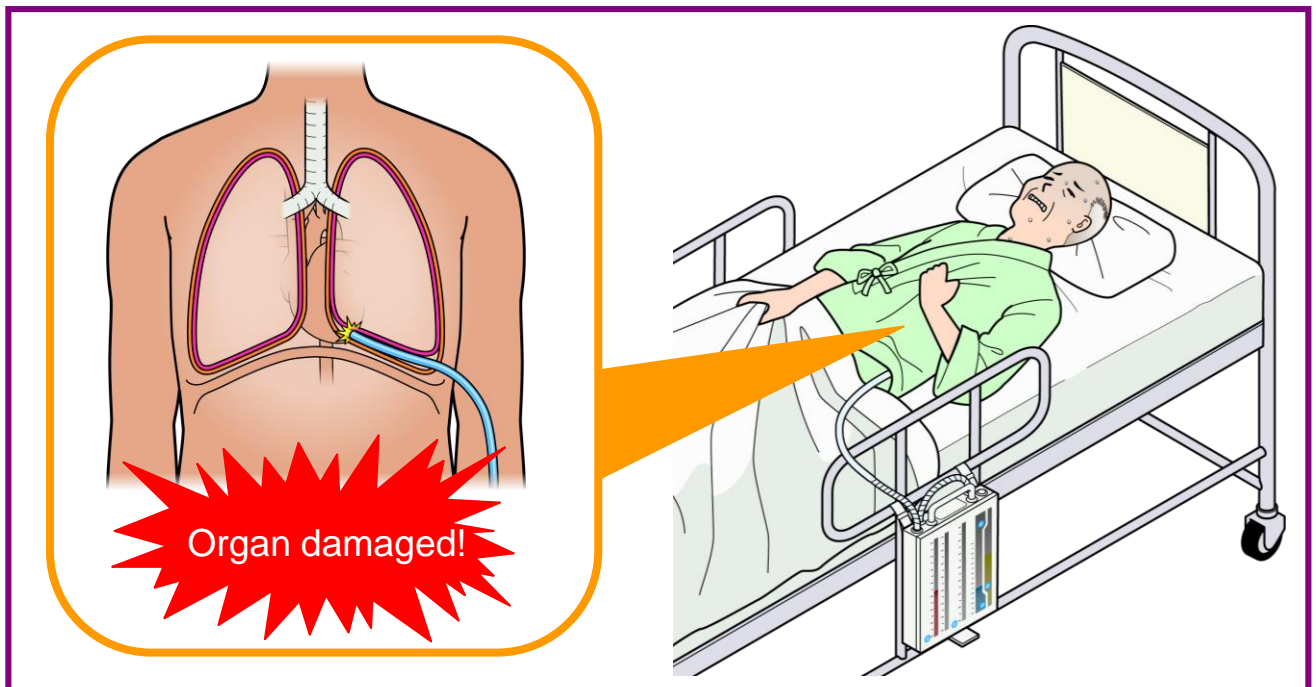
Precaution when Handling Thoracic Catheters

POINT Key points for safe use

- (Case 1)** As a chest X-ray revealed a collapse of the right lung, a thoracic catheter was inserted and the symptom was re-checked by a chest X-ray. When an autologous blood patch pleurodesis was performed 2 days after the thoracic catheter was inserted, the patient expectorated blood through coughing. A chest CT scan revealed that the thoracic catheter had penetrated the right upper lung field.
- (Case 2)** Pleural effusion was noted. When a thoracic catheter was inserted to perform drainage, the patient complained of pain and experienced a decrease in percutaneous oxygen saturation (SpO₂). Thoracoscopy revealed damage to the descending aorta and at the basal segment of the lung.

1 Precautions when placing thoracic catheters

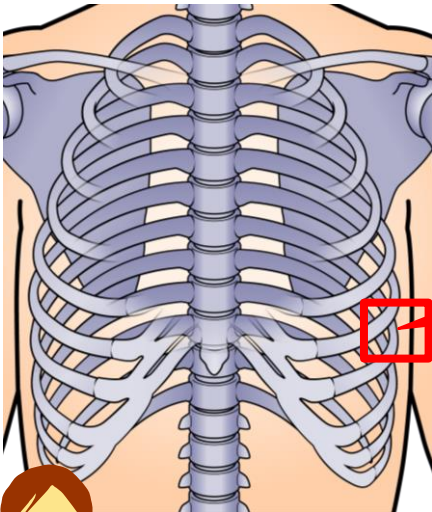
- When inserting a thoracic catheter, attention should be paid to the position and direction for insertion to prevent damaging blood vessels, lung, heart, and other organs.



Be careful of the risk of damaging the aorta, lung, heart, and other organs from not only thoracic drainage but also thoracentesis!

Precautions for the position/direction for insertion of thoracic catheters

The position to insert a thoracic catheter

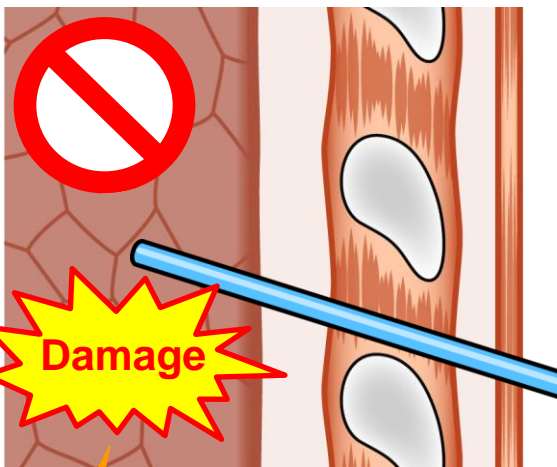


Intercostal vein
Intercostal artery
Intercostal nerve

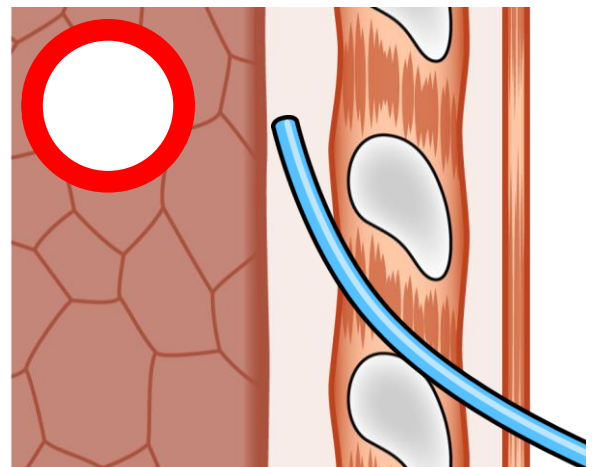


Be careful not to damage the intercostal vein/intercostal artery/intercostal nerve when inserting a catheter, etc. because they run just below the ribs!

The direction to insert a thoracic catheter



Thoracic catheters can damage the heart and blood vessels, depending on the position and direction for insertion, or can penetrate the liver or spleen.



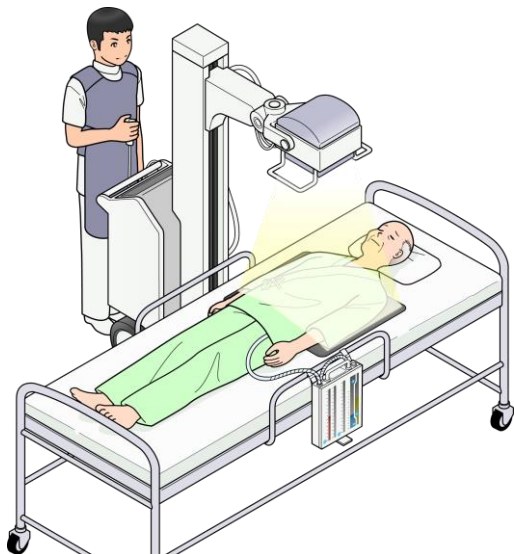
Pay attention to the direction for insertion when inserting the tip of the tube in the thorax so that it will not damage organs and tissues! Insert with caution, and if there are any abnormalities, it is important to suspend the insertion process and check for the presence/absence of complications.



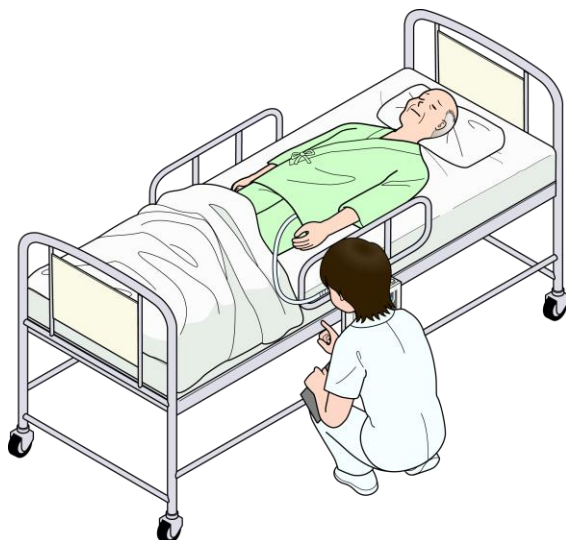
2 Precautions after inserting a thoracic catheter

Confirm that the thoracic catheter has been placed at the target position based on the chest X-ray image, and monitor the patient's condition.

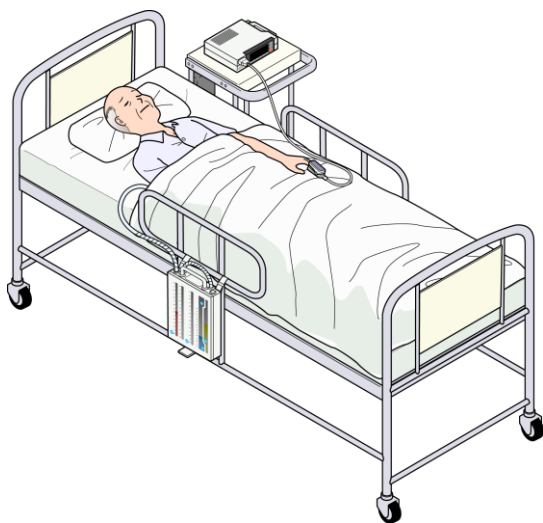
Confirmation by chest X-ray imaging



Check the volume of bloody effusion and air leak

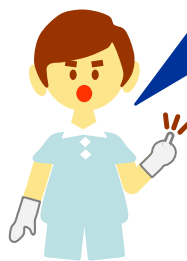


Check vital signs



Others

- Check for the development of subcutaneous emphysema, etc.



Persistent hemorrhage causes shock. It is important to check an increase in the volume of bloody effusion, vital signs, etc. and take necessary actions promptly!

About this information

- * PMDA Medical Safety Information is issued by the Pharmaceuticals and Medical Devices Agency for the purpose of providing healthcare providers with clearer information from the perspective of promoting the safe use of pharmaceuticals and medical devices. The information presented here has been compiled, with the assistance of expert advice, from cases collected as Medical Accident Information Reports by the Japan Council for Quality Health Care, and collected as Adverse Drug Reaction and Malfunction Reports in accordance with the Law on Securing Quality, Efficacy and Safety of Pharmaceuticals and Medical Devices.
- * We have tried to ensure the accuracy of this information at the time of its compilation but do not guarantee its accuracy in the future.
- * This information is not intended to impose constraints on the discretion of healthcare professionals or to impose obligations and responsibility on them, but is provided as a support to promote the safe use of pharmaceuticals and medical devices by healthcare professionals.

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navi service.

