

# Pneumothorax Under Pressure

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# What is pneumothorax ?

- ▶ A pneumothorax is a collapsed lung. A pneumothorax occurs when air leaks into the space between your lung and chest wall. This air pushes on the outside of your lung and makes it collapse.
- ▶ Pneumothorax can be a complete lung collapse or a collapse of only a portion of the lung

# Active Pneumothorax in Hyperbaric

- ▶ Active Pneumothorax is an absolute contraindication to hyperbaric oxygenation (HBO). During the decompression, at the end of the hyperbaric session, the increase in gas volume related to decreasing the pressure in the chamber can induce tension pneumothorax.
- ▶ The risk can be minimized through proper assessment of the patient chest and breath sounds . Also a clear chest X-Ray prior to the start of HBO treatment.

# What are signs and symptoms?

- ▶ Sudden shortness of breath
- ▶ Stabbing chest pain
- ▶ Tracheal shift
- ▶ Asymmetric chest movements
- ▶ Increase respiratory distress during decompression

# What to do if pneumothorax is suspected

- ▶ Stop decompression
- ▶ Notify Hyperbaric physician
- ▶ If Physician determines patient does in fact have tension pneumothorax, gather your equipment and staff to immediately insert 14-16 gauge needle upon opening the chamber door.
- ▶ Per physician order, bring patient up at a rate of 5psig or, as order per physician.
- ▶ Following the initial stabilization , make arrangements for appropriate transfer and further management.

# Post Test : Question 1

- ▶ Patients may experience the following symptoms during decompression \_\_\_\_\_ and \_\_\_\_\_.

# Post Test : Question 1 Answer

- ▶ Patients may experience the following symptoms during decompression sudden shortness of breath, stabbing chest pain, tracheal shift, asymmetric chest movement, and increased respiratory distress.

# Post Test : Question 2

- ▶ During the decompression the pneumothorax expands.

True or False



# Post Test : Question 2 Answer

- ▶ During the decompression the pneumothorax expands.

True

# Post Test : Question 3

- ▶ A pneumothorax in the Hyperbaric Chamber is not in serious condition.

True or False

# Post Test : Question 3 Answer

- ▶ A pneumothorax in the Hyperbaric Chamber is not in serious condition.

False

# Post Test : Question 4

- ▶ The patient may exhibit signs of cyanosis in the chamber.

True or False

# Post Test : Question 4 Answer

- ▶ The patient may exhibit signs of cyanosis in the chamber.

True

# Post Test : Question 5

- ▶ Patients with any kind of pulmonary lesions on x-ray should have a \_\_\_\_\_ descent rate.

# Post Test : Question 5 Answer

- ▶ Patients with any kind of pulmonary lesions on x-ray should have a decrease or slower descent rate.

# References

Case studys of pneumothorax in Hyperbaric treatment

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