

CHEST TRAUMA

From the list of options, choose the most likely injury for the following scenario.

A 25 year old man sustains a stab wound in the axillary region of the right chest. On admission to the Emergency Department, he is dyspnoeic, tachycardic and hypotensive. The neck veins are distended and the trachea is deviated to the left. The right chest is hyper-resonant on percussion.

- A. Aortic transection
- B. Aortic valve cusp rupture
- C. Bronchial rupture
- D. Chordal rupture
- E. Diaphragmatic rupture
- F. Flail segment
- G. Innominate artery injury
- H. Myocardial contusion
- I. Oesophageal rupture
- J. Pericardial rupture
- K. Pericardial tamponade
- L. Pneumothorax
- M. Pulmonary contusion
- N. Tension pneumothorax
- O. Thoracic duct injury

CHEST TRAUMA

From the list of options, choose the most likely injury for the following scenario.

A 45 year old woman sustains blunt trauma to the chest in a car crash. She is in respiratory distress. Chest X-ray reveals a right pneumothorax, a collapsed right lung and air in the mediastinum.

- A. Aortic transection
- B. Aortic valve cusp rupture
- C. Bronchial rupture
- D. Chordal rupture
- E. Diaphragmatic rupture
- F. Flail segment
- G. Innominate artery injury
- H. Myocardial contusion
- I. Oesophageal rupture
- J. Pericardial rupture
- K. Pericardial tamponade
- L. Pneumothorax
- M. Pulmonary contusion
- N. Tension pneumothorax
- O. Thoracic duct injury

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From the list of options, choose the most likely injury for the following scenario.

A 63 year old man sustains blunt chest trauma. After twenty four hours observation, the chest X-ray shows that the contour of the right hemidiaphragm is obscured by an effusion. Two days later the effusion is substantially larger and diagnostic aspiration reveals a milky white liquid.

- A. Aortic transection
- B. Aortic valve cusp rupture
- C. Bronchial rupture
- D. Chordal rupture
- E. Diaphragmatic rupture
- F. Flail segment
- G. Innominate artery injury
- H. Myocardial contusion
- I. Oesophageal rupture
- J. Pericardial rupture
- K. Pericardial tamponade
- L. Pneumothorax
- M. Pulmonary contusion
- N. Tension pneumothorax
- O. Thoracic duct injury

EXTRACORPOREAL LIFE SUPPORT

From the list choose the most appropriate support therapy for the clinical scenario.

A 66 year old woman is ventilated for five days because of rapidly progressive respiratory failure. Blood gas analysis shows pO_2 6 kPa and pCO_2 8 kPa with an FiO_2 of 100% and high peak airway pressure. She requires high dose vasoconstrictors to maintain her blood pressure. H1N1 influenza is confirmed on swabs and chest X-ray demonstrates bilateral consolidation.

- A. Bi-ventricular assist devices
- B. Extracorporeal membrane oxygenation, veno-arterial
- C. Extracorporeal membrane oxygenation, veno-venous
- D. Intra-aortic balloon pump
- E. Left ventricular assist device
- F. 'Novalung' interventional lung assist device
- G. Right ventricular assist device
- H. Total artificial heart

EXTRACORPOREAL LIFE SUPPORT

From the list choose the most appropriate support therapy for the clinical scenario.

A 4year old woman has a pO_2 of 14 kPa, and a CO_2 of 18 kPa with increasing acidosis, despite optimal ventilation. She has been treated by veno-venous extra-corporeal membrane oxygenation for 2days and was weaned and decannulated 24 hours earlier.

- A. Bi-ventricular assist devices
- B. Extracorporeal membrane oxygenation, veno-arterial
- C. Extracorporeal membrane oxygenation, veno-venous
- D. Intra-aortic balloon pump
- E. Left ventricular assist device
- F. 'Novalung' interventional lung assist device
- G. Right ventricular assist device
- H. Total artificial heart

EXTRACORPOREAL LIFE SUPPORT

From the list choose the most appropriate support therapy for the clinical scenario.

A 38 year old man has undergone pulmonary endarterectomy. Six hours post-operatively he has right heart failure secondary to residual pulmonary hypertension, reperfusion lung injury, a rising pCO_2 , acidosis and low cardiac output.

- A. Bi-ventricular assist devices
- B. Extracorporeal membrane oxygenation, veno-arterial
- C. Extracorporeal membrane oxygenation, veno-venous
- D. Intra-aortic balloon pump
- E. Left ventricular assist device
- F. 'Novalung' interventional lung assist device
- G. Right ventricular assist device
- H. Total artificial heart