Empyema

What is Empyema?

It is gathering of pus pleural space. Sometimes it is called Thoracic empyema affects gallbladder cyst and other parts of the body.
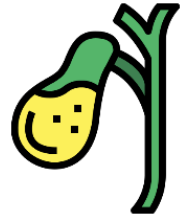
What is the most vulnerable group of Empyema?

It may occure to any person in any generation of different ages, but it is more common in adult, especially those of weak health condition.
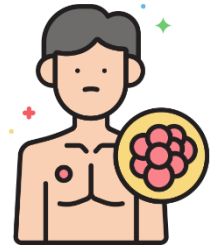
What are Empyema types?

There are tow types of Empyema:

1- Aerobic: is more common in persons of

good health condition.

2- Anaerobic : It is common in patients of

pneumonia, chest tumors, diabetics,

dentistry diseases.

What are the symptoms of Empyema?

- Dry cough & dyspnea

- Fever & chills

- sweating, especially night sweats

- Anorexia

- Weight loss and Bad smell phlegm

- Chest pain, which increases when taking deep inhalation (inspiration)

What are the Main causes for developing empyema in pleural space?

1. Surgical procedures such as chest surgeries for example: lung resection or lobe surgeries, esophagus surgeries, oral and jaw surgery, or teeth and tonsils
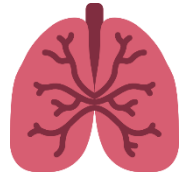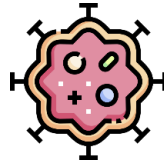
2. An abscess in the lungs or under the chest.

3. Esophageal rupture

4. A foreign body in the respiratory tract

5. Frequent injuries in the chest area

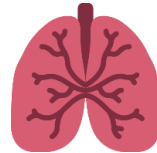6. Pneumonia or malignant lung disease
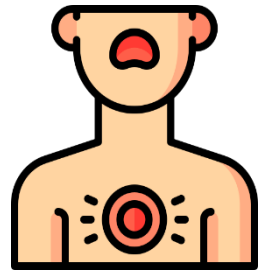
What are the risk factors of developing empyema?

- Cancer

- Heart and lung disease

- Diabetes

- use of medication that suppress

  inmmune system

- Durgs and alcohol intake

What are the complication of Empyema?

1. Cyst formation

2. Pus in some parts of the body (liver, brain)

3. Fistula between the space of the pleura and the airways and between the space of the pleura and the esophagus

4. Death

How is Empyema diagnosed?

- Patient history and physical examination

- Imaging for the rib cage

- Biochemical examination of pleural fluid

- Increase in the number of white cells in the blood and pleura fluid

- Chest CT scan

- The color of sputum in the pleura flu

How is Empyema treated ?

Treatment is through:

- Pharmacotherapy, in which antibiotics are given intravenously.

- Surgical treatment which has to purposes: one is to empty the fluid and and the other is to fill the contaminated space.

How the liquid is discharged from the contaminated space?

It hppens in the following ways:

❖ Install a tube to drain the fluids.

❖ Introducing coagulant dissolving agents into the pleura.

❖ Introduce antibiotics.

❖ Filling the affected space in the chest through a surgical operation performed under general anesthesia

Notes:

Thinking to decide the appropriate surgry is based on the patient's nutritional health and general condition.

What are the Guidelines after the surgical procedure?

- Deficiency may occur after the operation due to infection and inability to clear secretions for about 2-3 days.To prevent this, make sure to take medications such as: bronchodilators, and intravenous fluids.
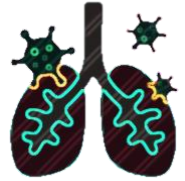
- Physical therapy is important such as breathing exercises, deep coughing, and spirometry.

- Early movement after the surgical procedure and physical therapy reduces complications.

- In case there is pulmonary insufficiency after the operation, especially in patients with low expiratory volume, aspiration or tracheal surgery should be used

Note:

Early postoperative movement and physiotherapy reduces

complications such as pneumonia and hematoma,

also the patient should not be allowed to eat food

except when he is fully alert and seated

Sources and references

All pictures used are from the (flaticon) websit

Review and audit:

The content of this booklet has been reviewed by consultants of the

Surgery department at King Fahad University Hospital

Health Awareness Unit

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