# Aspiration

Z. Rozkydal

Aspiration = breath in of a solid body or fluid into airways

Aspiration of water Disturbance of lung tissue

Aspiration of fluid from the stomach

- Damage to lung tissue by acid fluid
- Atelectasis, inflammation

Aspiration of solid body Atelectasis. inflammation



Cough, stridor, dyspnoe, cyanosis No ventilation movements of the chest wall Tachypnoe, tachycardia, hypotensis Unconsciousness Stop of breathing follows in 2-3 minutes stop of circulation

### First aid

Free airways Opening of mouth Cleaning of the mouth or removal of arteficial teeths, Esmarch maneuver

5 strokes between scapulas5 Heimlich maneuvers

Coniotomy, coniopuncture CPR Ventilation by device

### Management

Tracheostomy Ventilation Succion of fluid from airwas Bronchoscopy Nasogastric tube Antibiotics **Respiratory insufficience** 



Obstruction of airways Diseases of lung and chest Cardiovascular diseases Diseases of CNS

ARDS – acute respiratory distress syndrom



Dyspnoe Difficult breathing Weakness Preassure on the chest Confusion

## Dyspnoe

Physiological-sport, labor, speed walking, run Lungs- asthma bronchiale, damage of lungs Cardial- asthma cardiale Circulatory- high loss of blood, anemia Chemical- diabetic coma Central - CNS lesion **Psychogenic-hystery** 

Management depends of the cause

# **Pulmonary embolism**

Blockage of arteries and capilars in the lungs by trombus, fat tissue or by the air

The frequet cause: phlebotrombosis in lower extremity or in the pelvis

# Symptoms

Sudden dysnoe, full veins in the neck region Cyanosis, tachypnoe, tachycardia Pain on the chest wall, caugh, haemoptysis Syncope, hypotensis, shock

30 % of pulmonary embolism is asymptomatic



# CRP, oxygen

### Management

# Oxygen, ventilation, dopamin, noradrenalin, heparin i.v.

# Asthmatic attack

### Asthma bronchiale

Spasm of muscles in bronchi Oedema in bronchial mucous membrane Elevated secretion of viscous mucous fluid

Narrowing of airways High attempt to breath Respiratory acidosis, hypoxia

# **Symptoms**

Dyspnoe, dry caugh, long exspirium Exspiratory phenomenons, pressure on the chest Tachypnoe, tachycardia, cyanosis Sweating, dehydration Orthopnoic position, difficult speech

# First aid

Rest, fresh air Fowler position, orthopnoic position Corticoids in spray: Berotec, Ventolin, Becodisk, Atrovent Berodual, Intal, Pulmicort

# Management

ITU Inhalation of oxygen –through fluid Spray – Berotec, Ventolin, Becodisk, Atrovent Intal, Berodual, Pulmicort Adrenalin 0,5 ml s.c. Corticosteroids i.v. Aminophylin i.v. **Mucolytics** – inhalation Intubation and ventilation

## **Status asthmaticus**

Long lasting asthmatic attack

Management ITU, ventilation, intubation and others