

IN THE NAME OF GOD

Fat Embolism Syndrome

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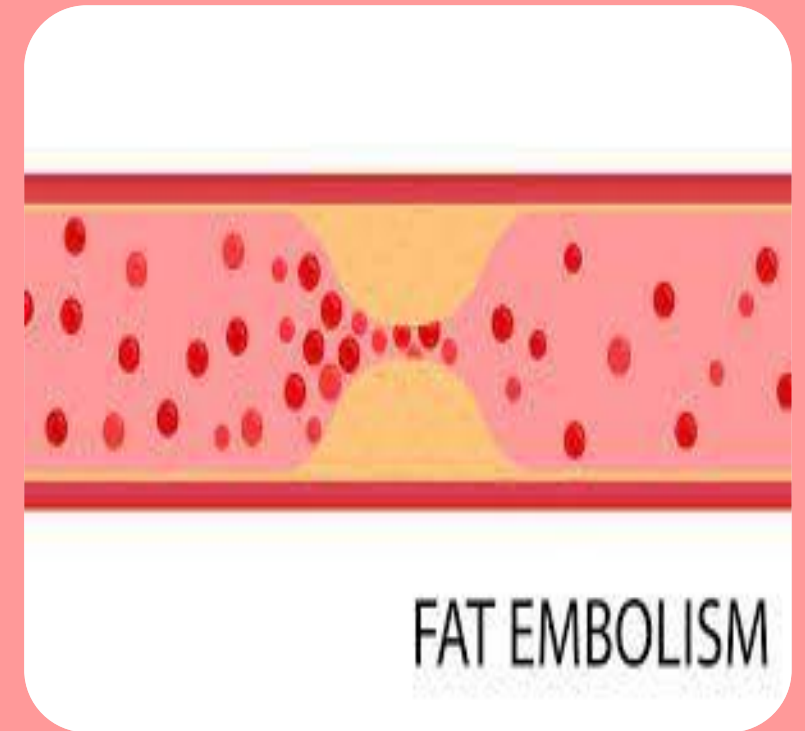
Master: Mr. Rasouli

❑ What is Fat Embolism Syndrome?

Fat embolism (FE) is defined as the presence of fat globules within the circulation. Fat embolism is extremely common after trauma and occurs, to a variable extent, in the majority

Of patients suffering long bone or pelvic fractures.

In the majority of patients, fat emboli appear to have minimal physiological effects and most patients display no signs or Symptoms.



FAT EMBOLISM

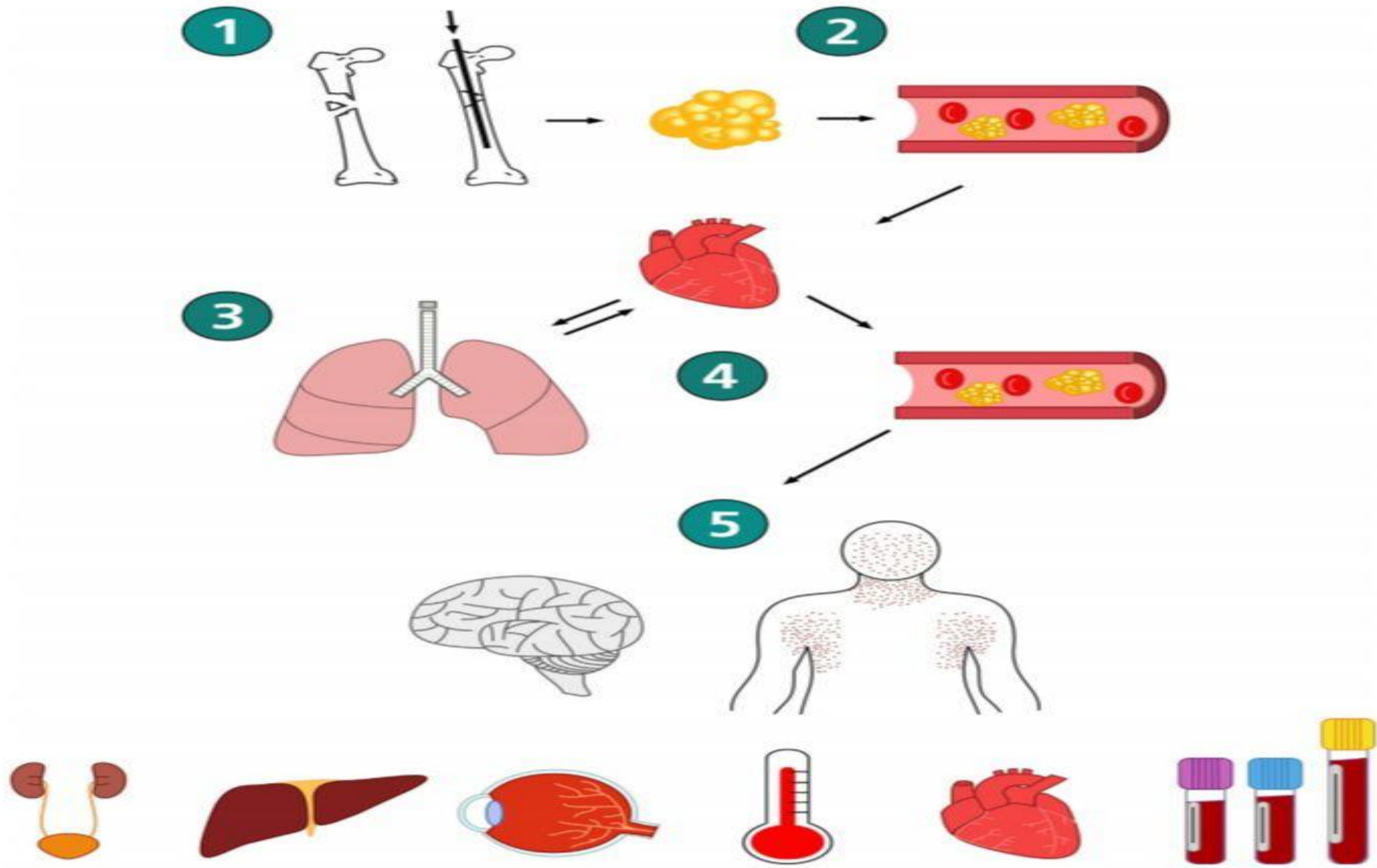
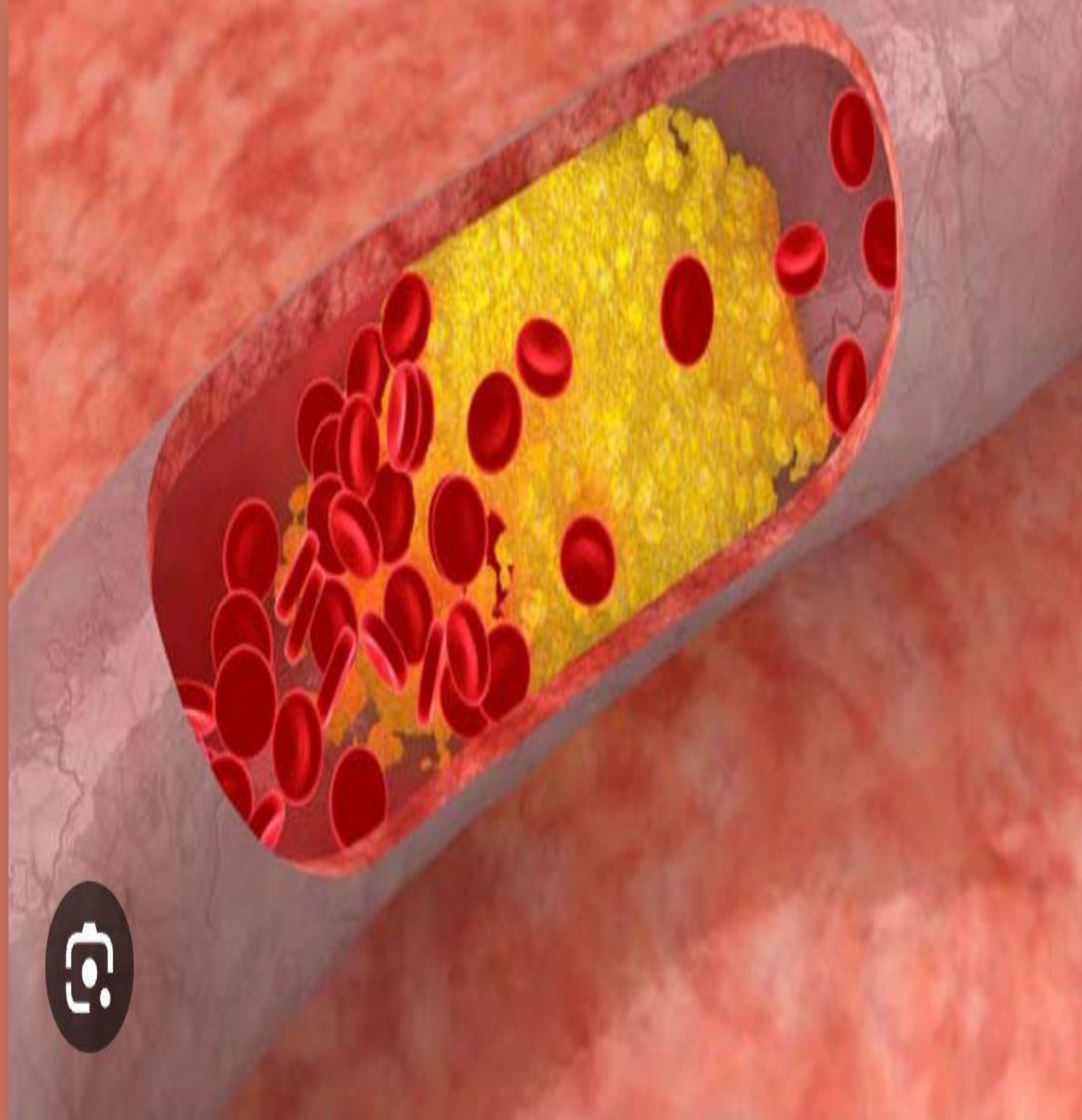


Fig 1 Typical clinical progression of fat embolism syndrome. (1) Long bone fracture or intramedullary instrumentation causes (2) bone marrow fat to enter the venous circulation. (3) Fat embolises to the pulmonary capillary bed causing alveolar damage and dysfunction. (4) Fat may enter the systemic circulation via a patent foramen ovale, arteriovenous shunts, the pulmonary capillary bed, or all three. (5) Fat subsequently embolises and damages other organs including neurological, dermatological, renal, hepatic, ophthalmic, cardiovascular, and haematological systems (see [Table 1](#) for organ-specific signs and symptoms).

Fat embolism syndrome usually happens within 2 to 3 days after a major bone break or other types of trauma. But it can happen as soon as 12 hours after an injury.



□ Symptoms :

Shortness of breath

Neurologic changes such as (confusion, headache, or seizures)

Petechial rash

Racing heart rate

Fever

Jaundice of the skin or eyes



❑ **Diagnosis and Tests:**

At this time, there's no universally accepted standard for diagnosing this condition. Because of that, doctors make this diagnosis based on your symptoms, a physical exam, diagnostic and lab testing



□ Treatment :

There's no cure for fat embolism syndrome, and there's no standard treatment plan for cases of the condition. Treatments for fat embolism syndrome can include medications, life-supporting devices and treatments to prevent further complications



❑ Possible treatment :

Oxygen

Corticosteroids

Ventilation



thank
YOU:-)

