



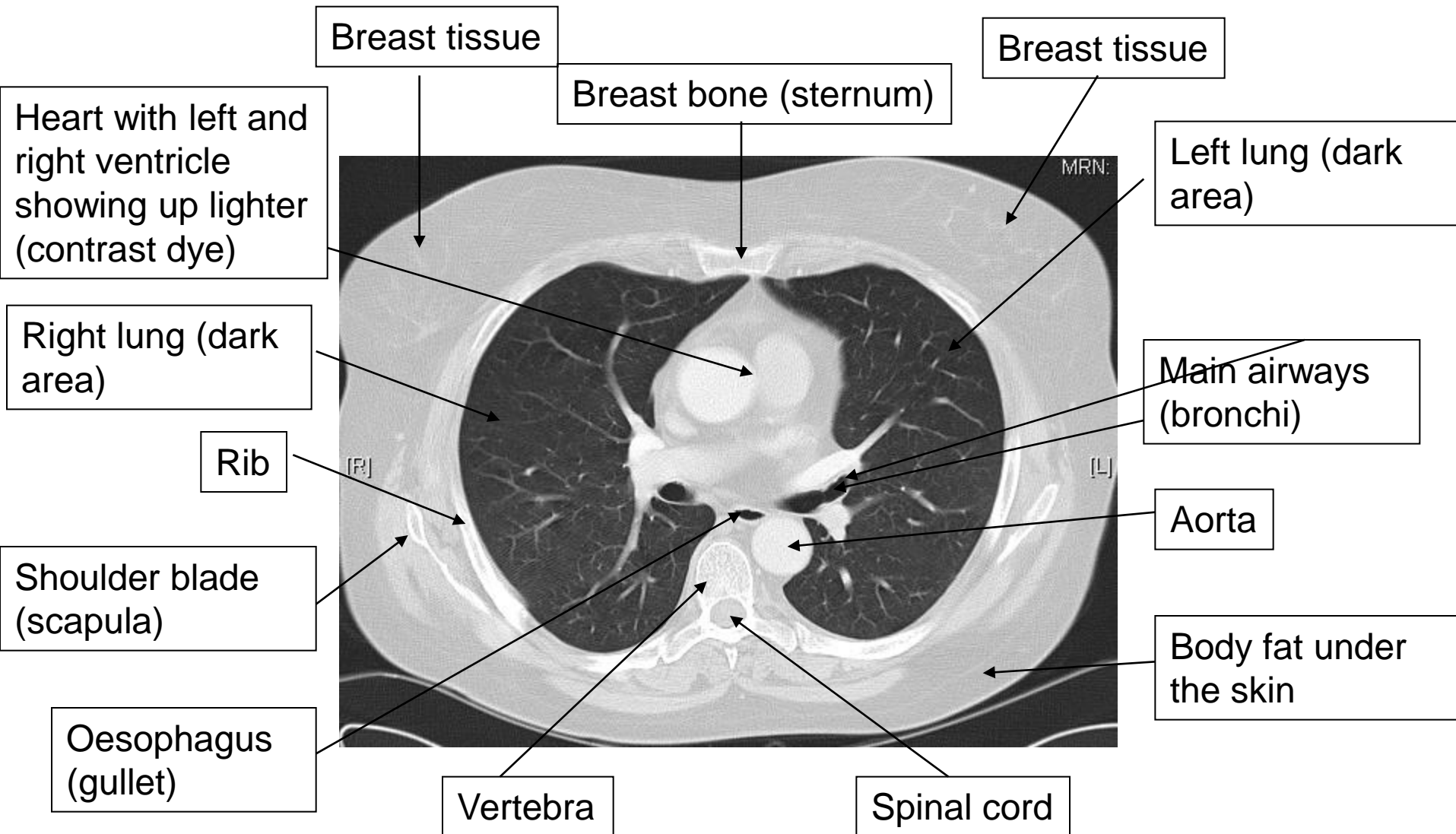
LEADING
INTERNATIONAL
FUNGAL
EDUCATION



CT scan and radiology images

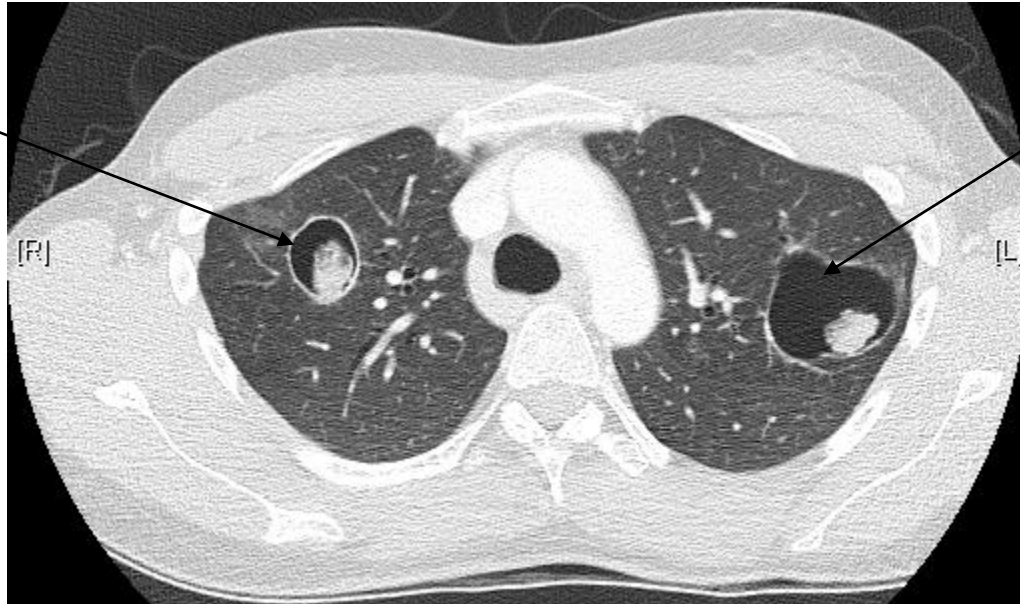
Updated July 2021

Normal CT scan of the chest



2 fungal balls in the lung (2 aspergillomas)

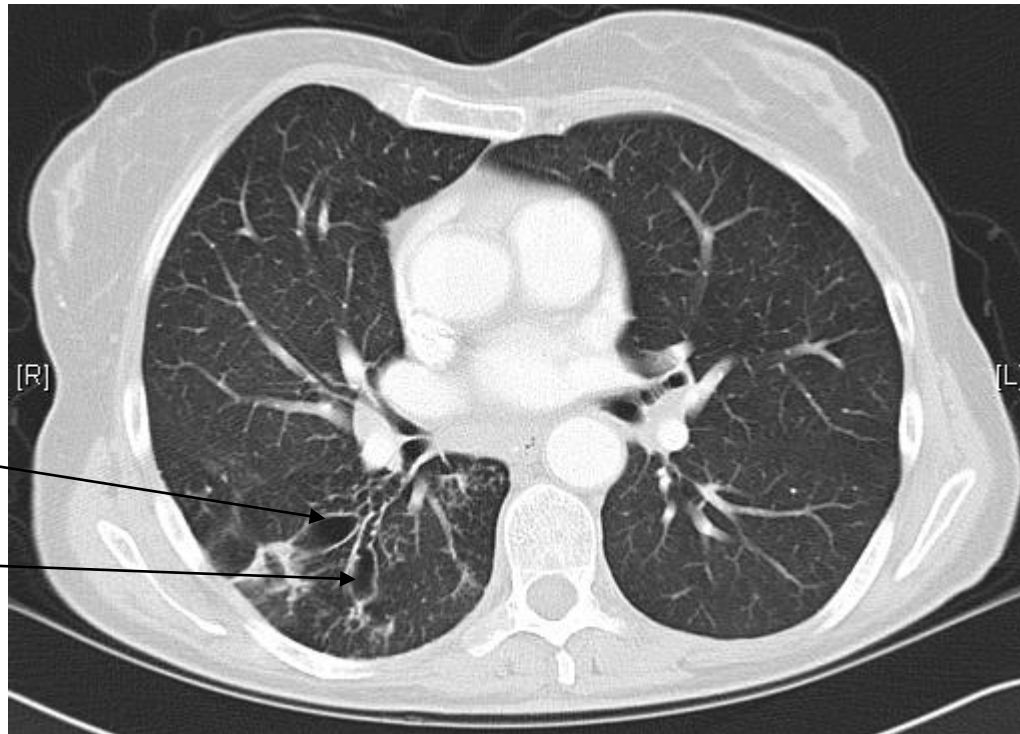
Moderate cavity in the lung with a thin surrounding wall containing a large fungal ball caused by *Aspergillus*



Large cavity in the lung with a thin surrounding wall containing a large fungal ball caused by *Aspergillus*

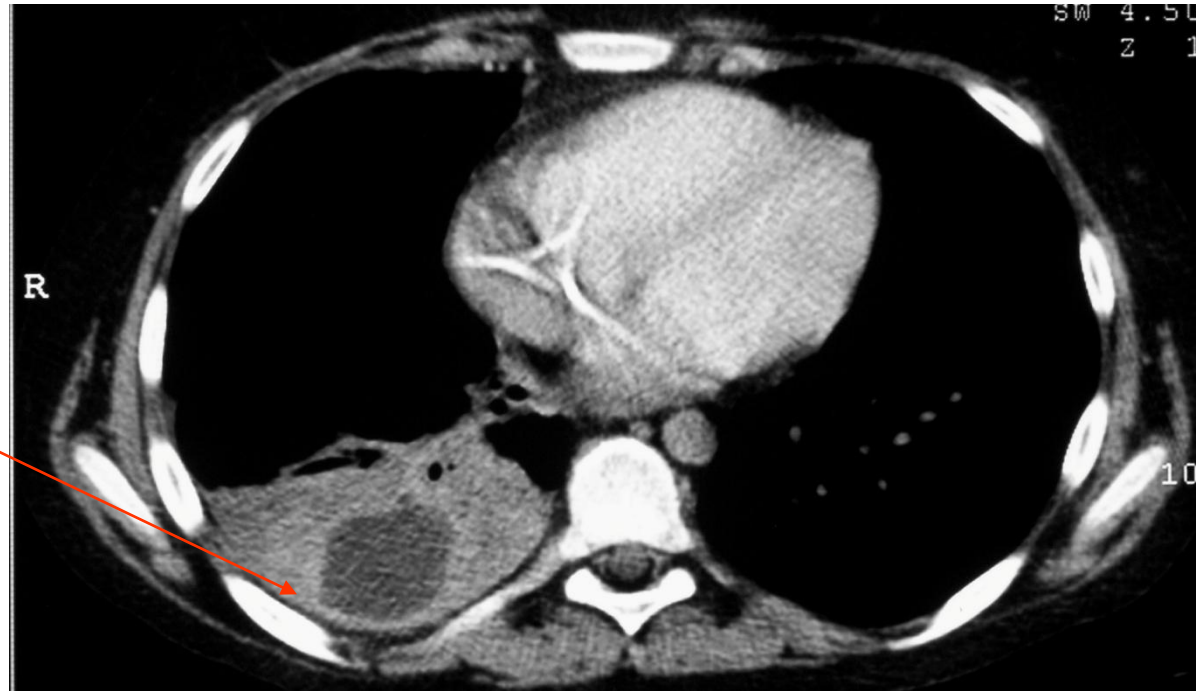
Allergic bronchopulmonary aspergillosis and bronchiectasis

Enlarged and irregular airways in the right lung caused by long term *Aspergillus* allergy and repeated infection (bronchiectasis)



Invasive fungal infection of the lung caused by *Aspergillus*

Nodular mass in the left lung which had a needle placed in it to remove tissue and *Penicillium* was grown



Large area of 'pneumonia' caused by *Aspergillus*, in a 14-year-old boy with a T cell lymphoma receiving chemotherapy and low white blood cells. He first noticed this when he developed sudden onset, severe chest pain. His phlegm sputum grew *Aspergillus*. Later he developed a thyroid swelling and a needle aspiration also grew *Aspergillus*, indicating dissemination of invasive aspergillosis. He then underwent a right lower lobe removal which confirmed the diagnosis of invasive pulmonary aspergillosis.

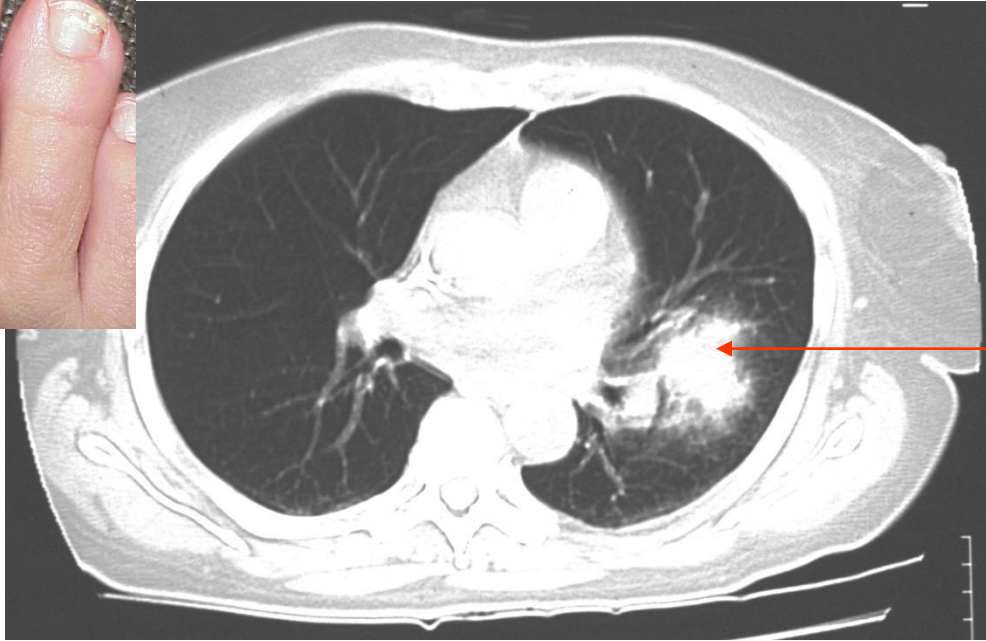
Invasive fungal infection of the lung caused by *Penicillium*



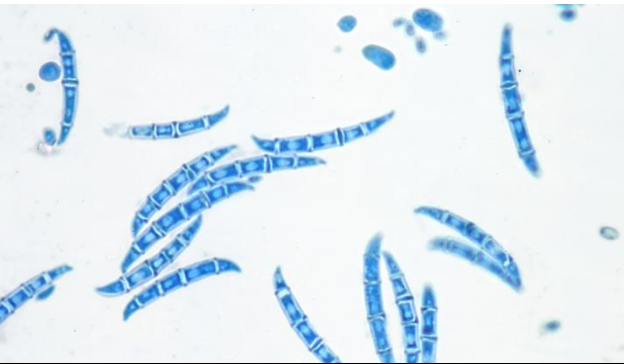
Nodular mass in the left lung which had a needle placed in it to remove tissue and *Penicillium* was grown

This disease occurred in a 22-year-old male, with an inherited immune deficiency in which his white cells were poor at killing bacteria and fungi (Chronic Granulomatous Disease). He had previously suffered from an *Aspergillus* infection of his left lung and both feet, and had been taking oral antifungals for 4 years when this *Penicillium* infection occurred.

Invasive fungal infection of the lung caused by *Fusarium*



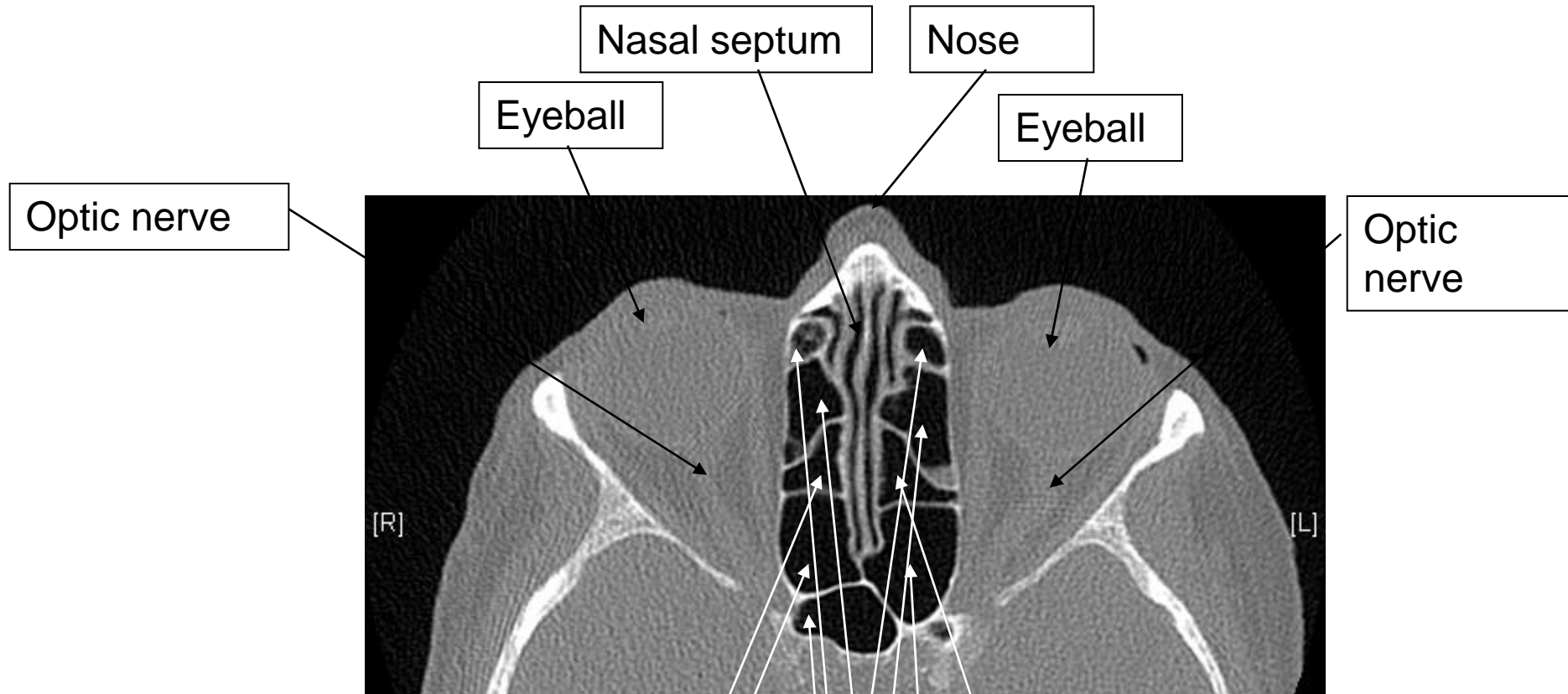
Nodular mass in the left lung which is typical of a fungal infection. This patient's blood culture grew *Fusarium* and he had toenail infection caused by the same infection.



Fungal infection of the toenails is usually not problematic but when it occurs in leukaemia, as in this man, it can spread through the bloodstream to the skin and lungs.

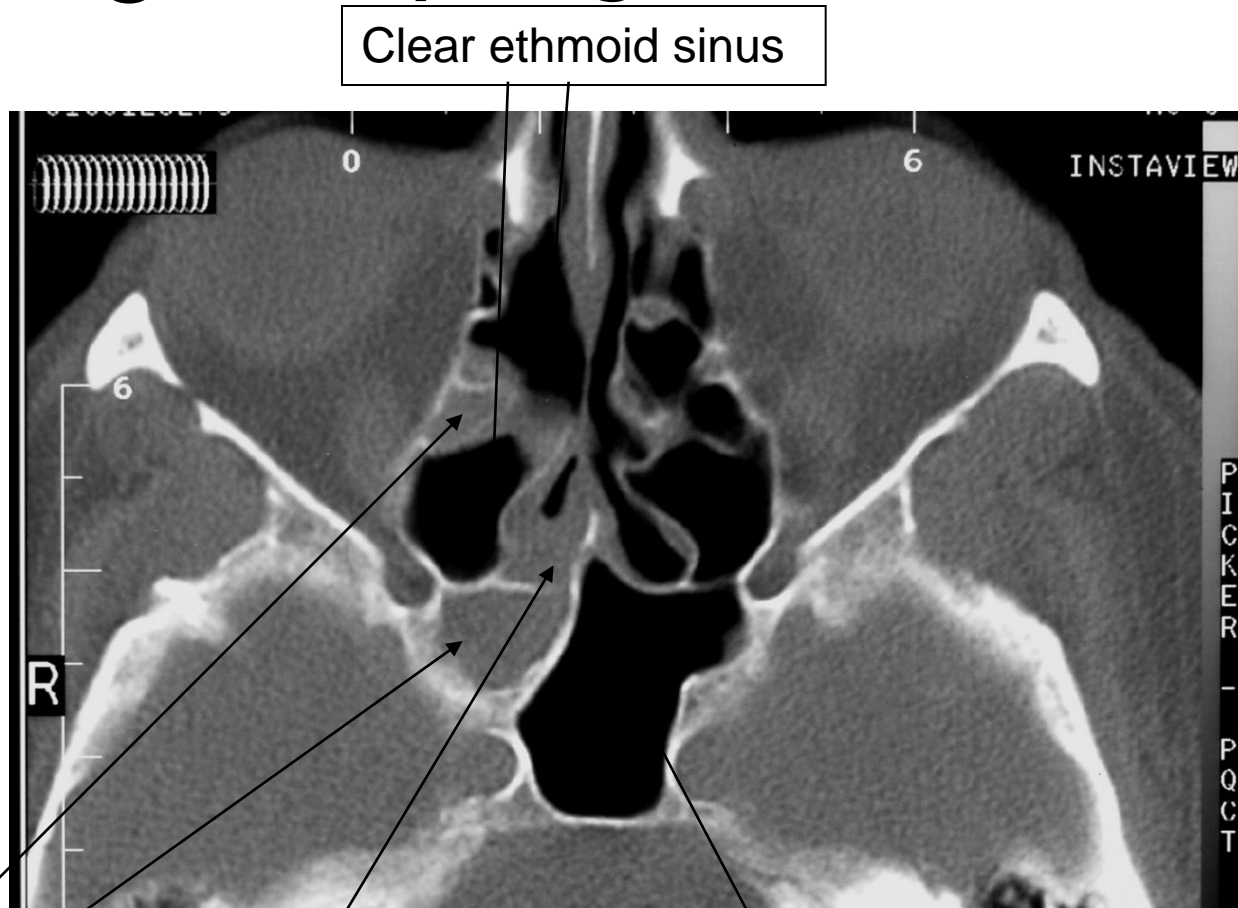
Fusarium under the microscope

Normal paranasal sinuses



In each person there are maxillary, ethmoid, sphenoid and frontal sinuses

Allergic *Aspergillus* sinusitis

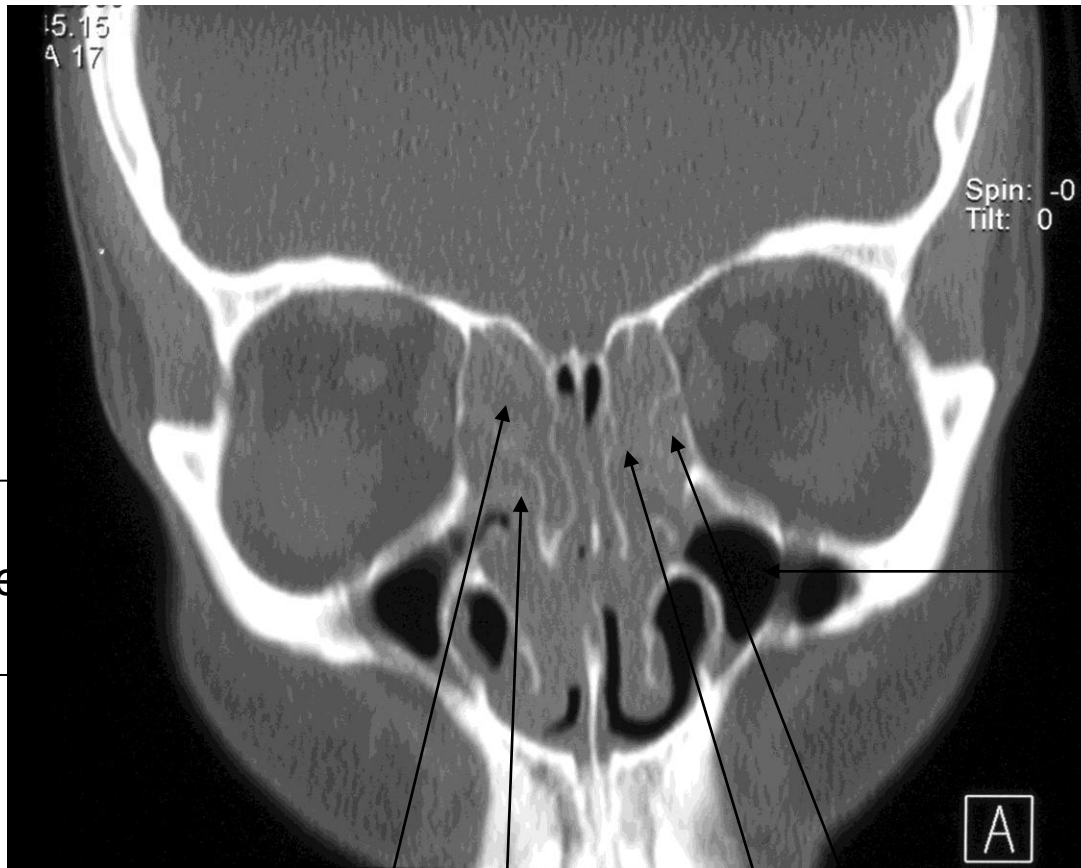


Clear ethmoid sinus

Ethmoid sinuses completely full of allergic mucin caused by *Aspergillus*

Sphenoid sinus with good drainage into the ethmoid sinuses

Allergic *Aspergillus* sinusitis

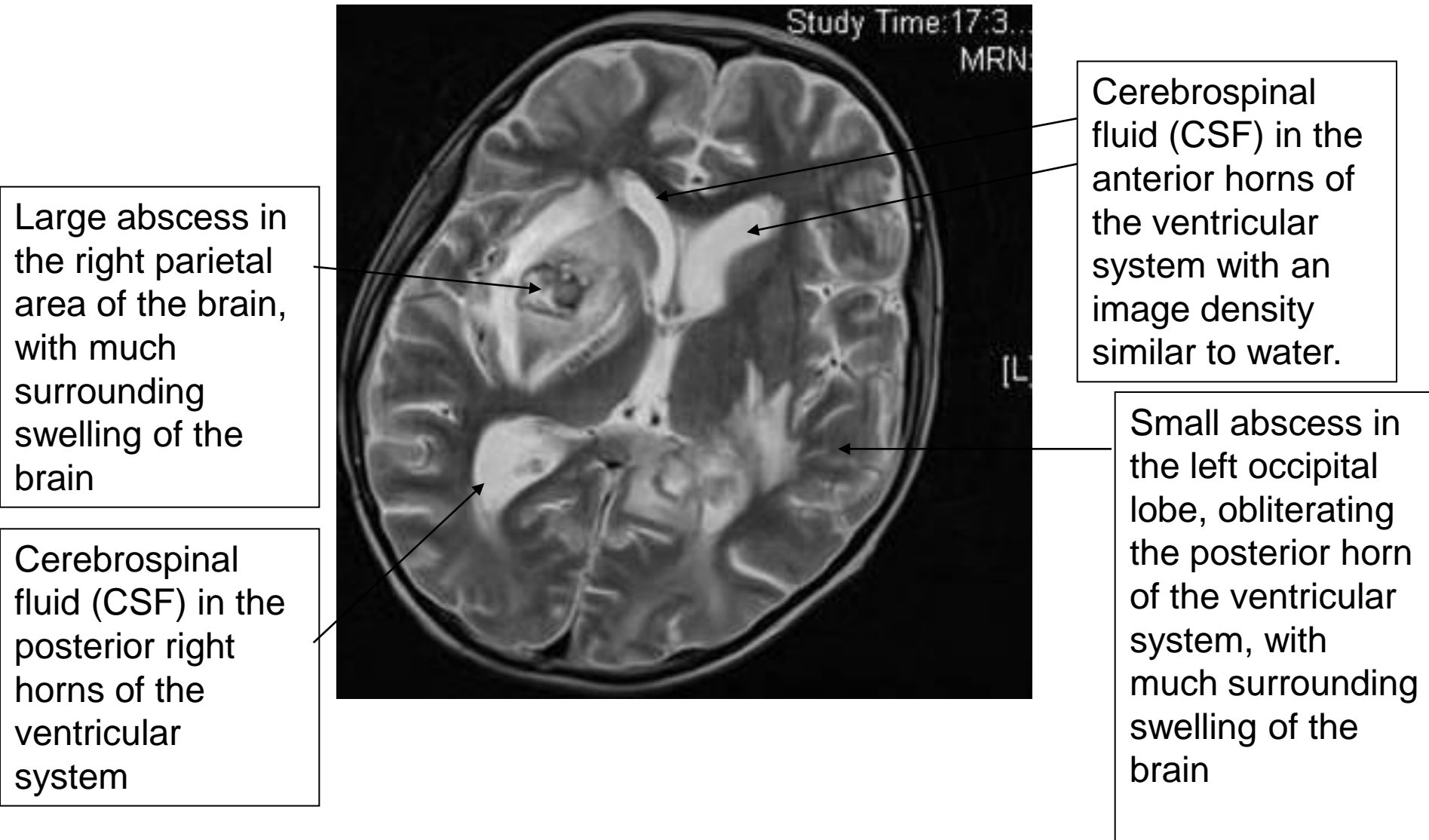


Maxillary sinus
containing some
allergic mucin

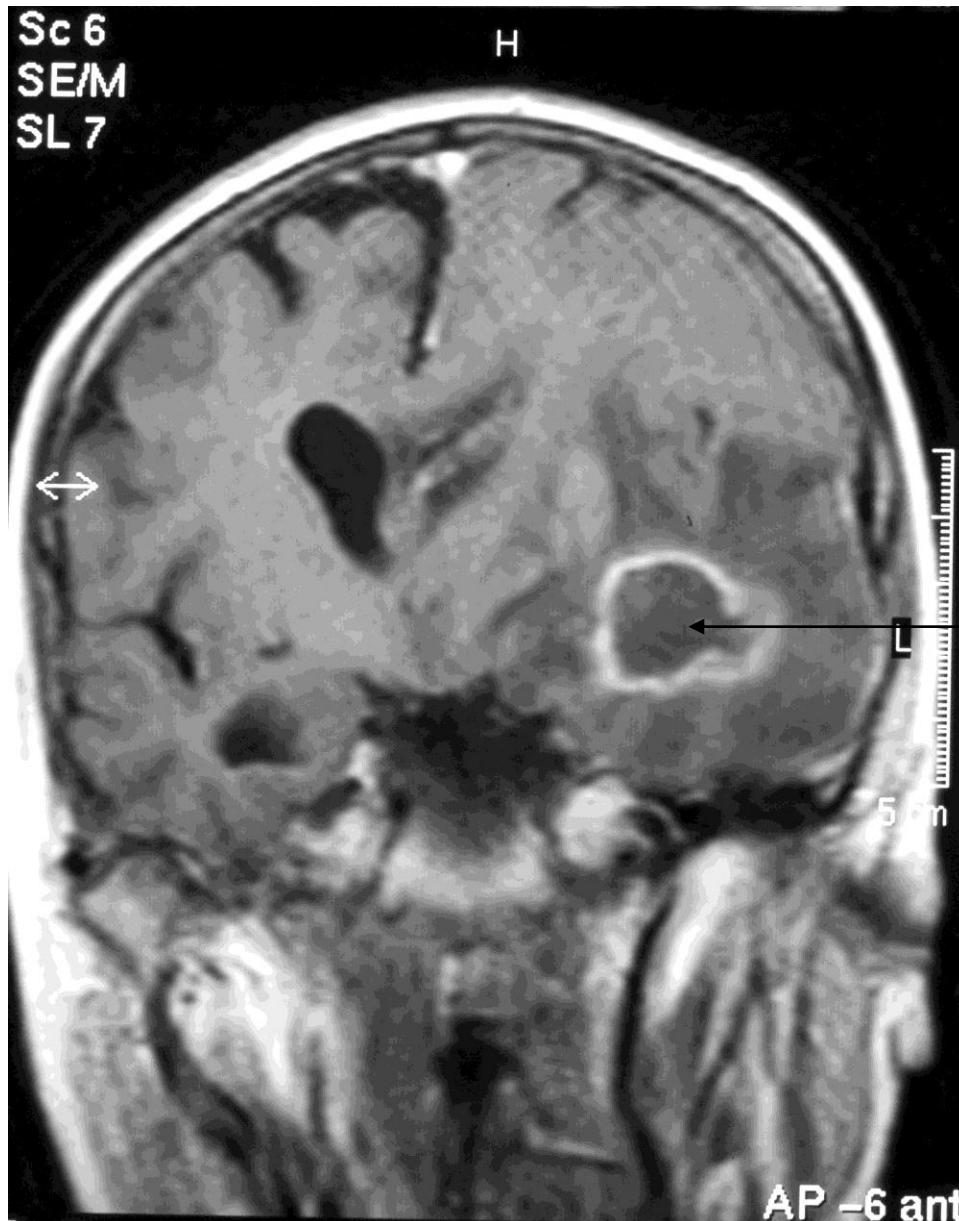
Maxillary sinus
almost clear of
allergic mucin

Ethmoid sinuses on both sides completely full
of allergic mucin caused by *Aspergillus*

Aspergillus abscess in the brain



Aspergillus abscess in the brain



Abscess surrounded by a wall of inflammation, itself surrounded by brain swelling

A 44-year-old woman developed confusion while in hospital and an MRI scan showed this abscess. She was operated on and the abscess drained. The fluid grew *Aspergillus*.