

## Qualitative examples of rationale diagnosis task

### Input Prompt

<image-1> Patient Data Age: 65 years Gender: Male Acute onset chest pain and hypoxia. Analyze the provided images and identify the disease that is commonly associated with such radiological findings. Discuss the characteristic radiographic manifestations.



<image-1>

### RadFM Prediction

Pulmonary embolism. The Radiographic features can be summarized as follows. Plain radiograph:

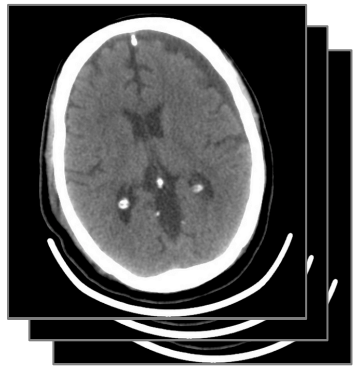
- Fleischner sign: enlarged pulmonary artery
- Hampton hump: peripheral wedge of airspace opacity implying lung infarction
- Westermark sign: regional oligemia
- Pleural effusion
- Knuckle sign: enlarged right descending pulmonary artery
- Palla sign: enlarged right descending pulmonary artery
- Chang sign: dilated right descending pulmonary artery with sudden cut-off
- Elevated diaphragm

CT:

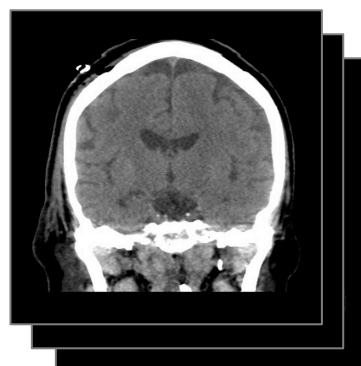
- Filling defects within the pulmonary vasculature with acute pulmonary emboli
- Polo Mint sign: central filling defect surrounded by a thin rim of contrast
- Thin stream of contrast adjacent to non-occlus

### Input Prompt

Patient Data Age: 75 years Gender: Male Follow up of traumatic subarachnoid hemorrhage Analyze the provided images and identify the disease that is commonly associated with such radiological findings. Discuss the characteristic radiographic manifestations.  
<image-1> <image-2>



<image-1>



<image-2>

### RadFM Prediction

Subarachnoid haemorrhage.

The Radiographic features can be summarized as follows. CT: Non-contrast CT is frequently performed first due to wider availability. It is more sensitive to hemorrhage and can detect hyperdense material filling the subarachnoid space, commonly around the circle of Willis or in the Sylvian fissure. Small amounts of blood may also be seen pooling in the interpeduncular fossa or within the occipital horns of the lateral ventricles. Subarachnoid hemorrhages are grouped into four categories according to the amount of blood on unenhanced CT by the Fisher scale.

MRI: MRI is sensitive to subarachnoid blood and can visualize it well in the first 12 hours as a hyperintensity in the subarachnoid space on FLAIR. Susceptibility-weighted