Practical Pitfalls of OCT in Tissue Characterization

- An Ex Vivo Histopathological Validation -

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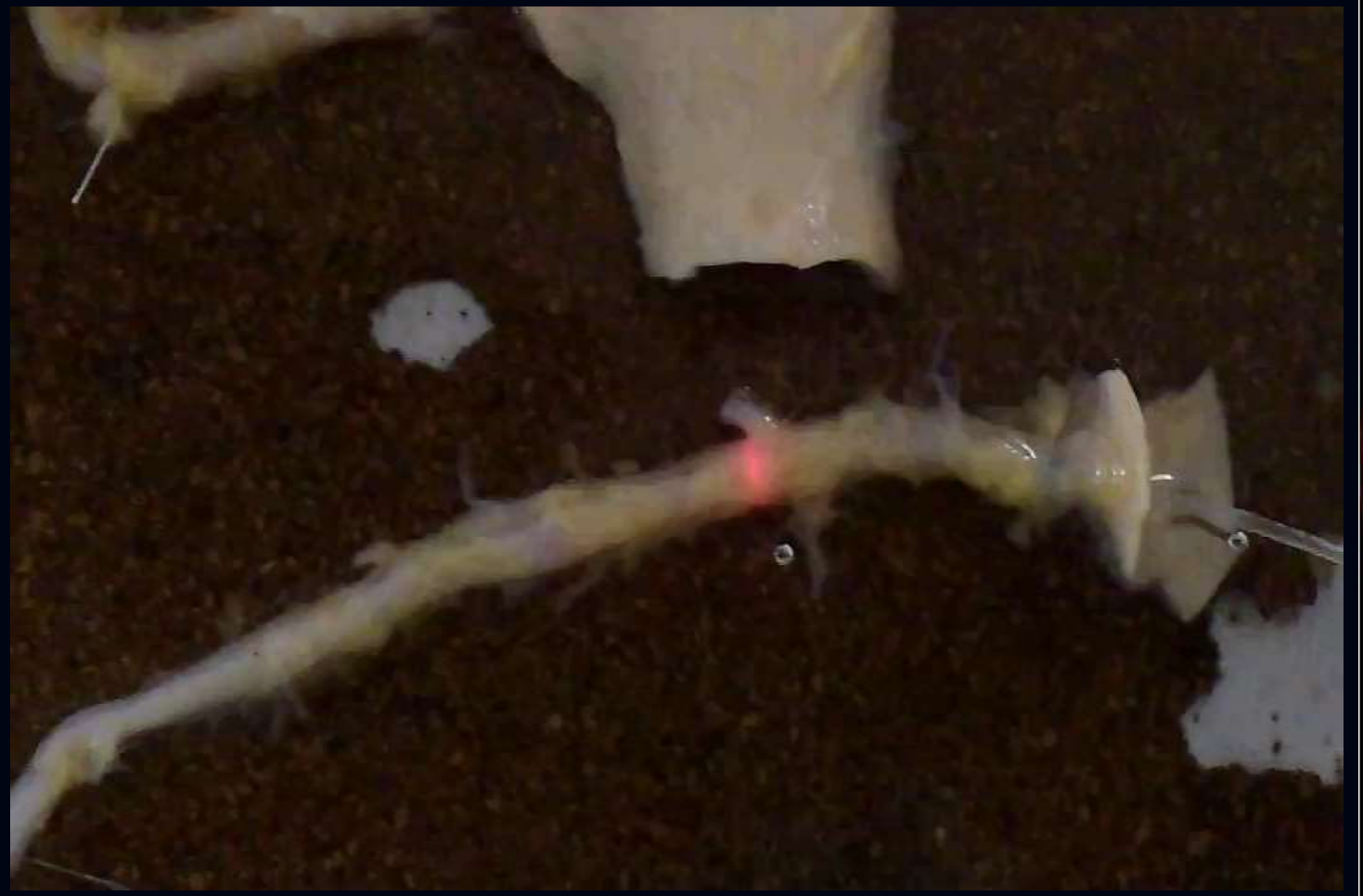
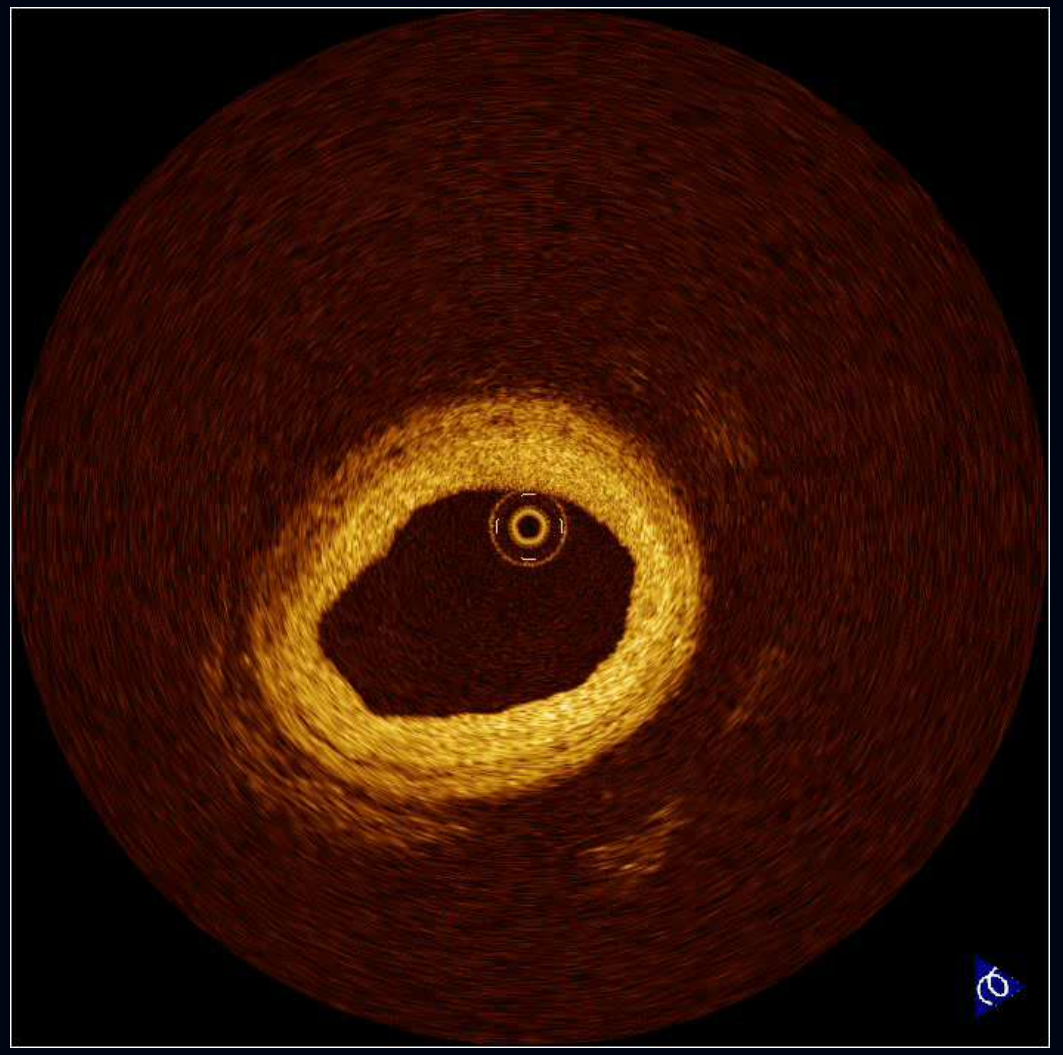
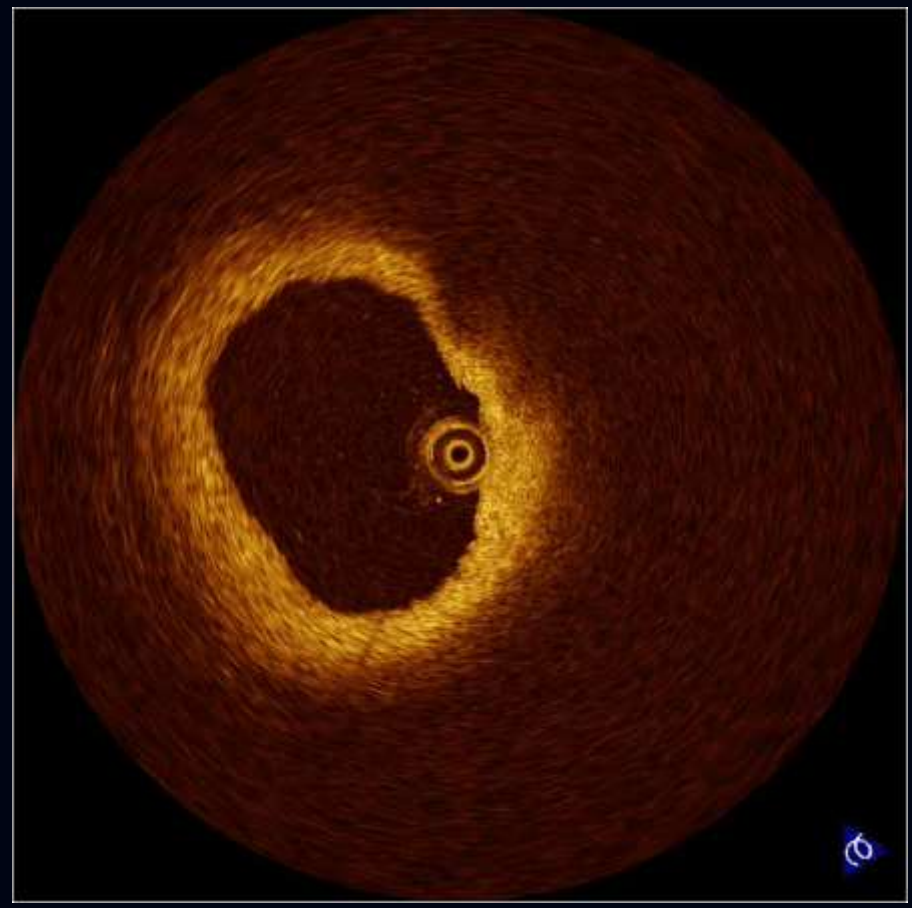
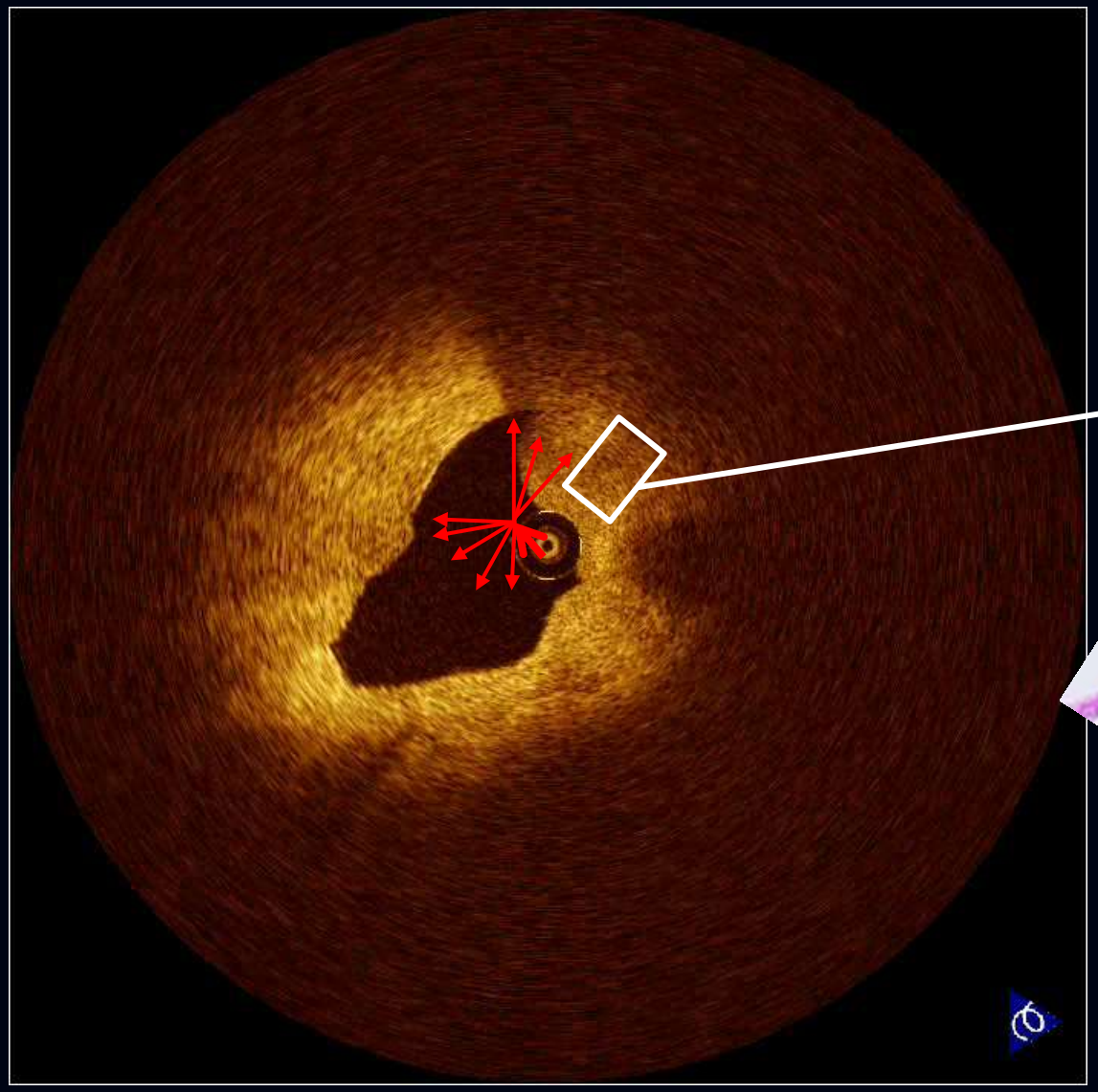
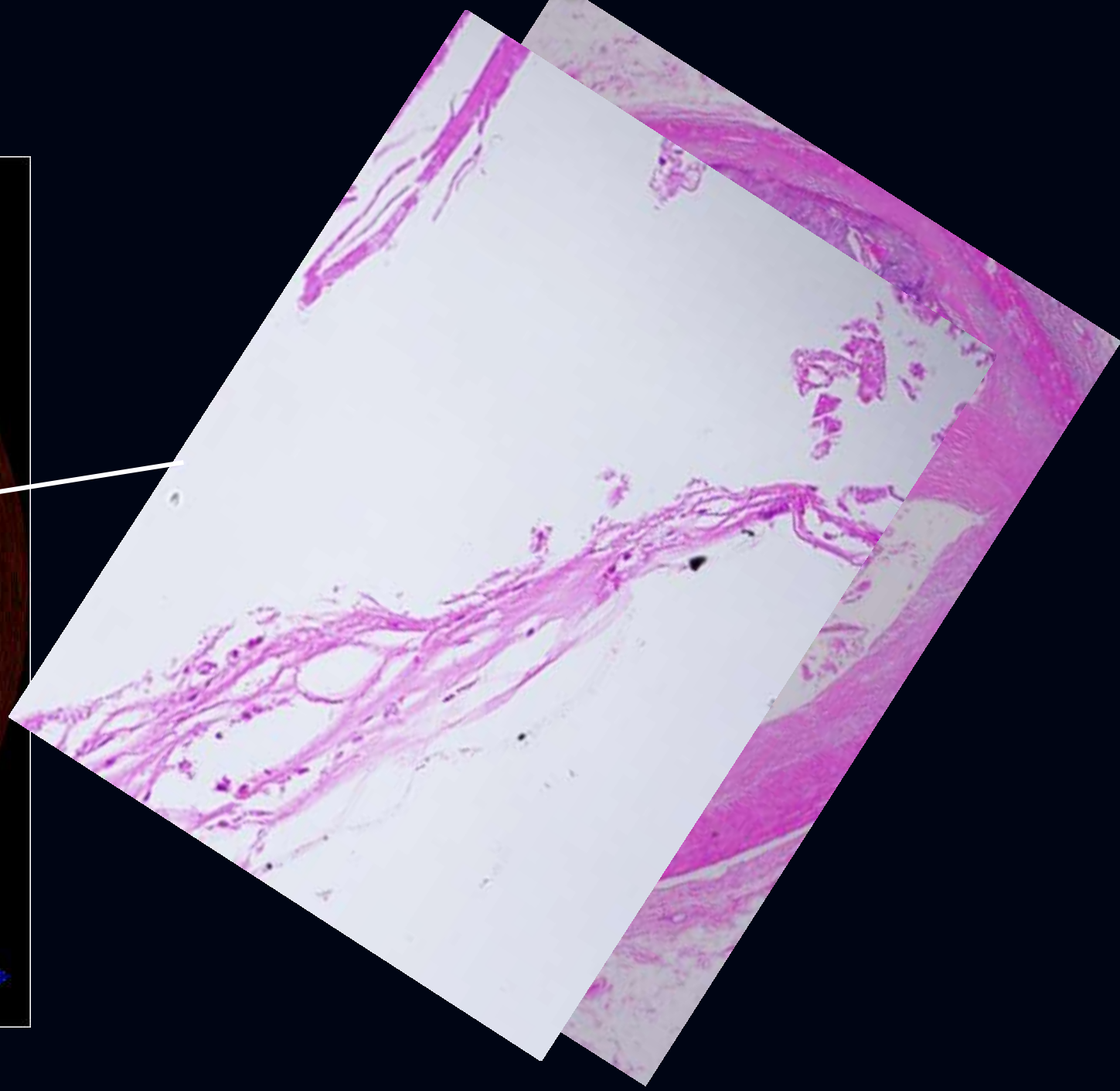
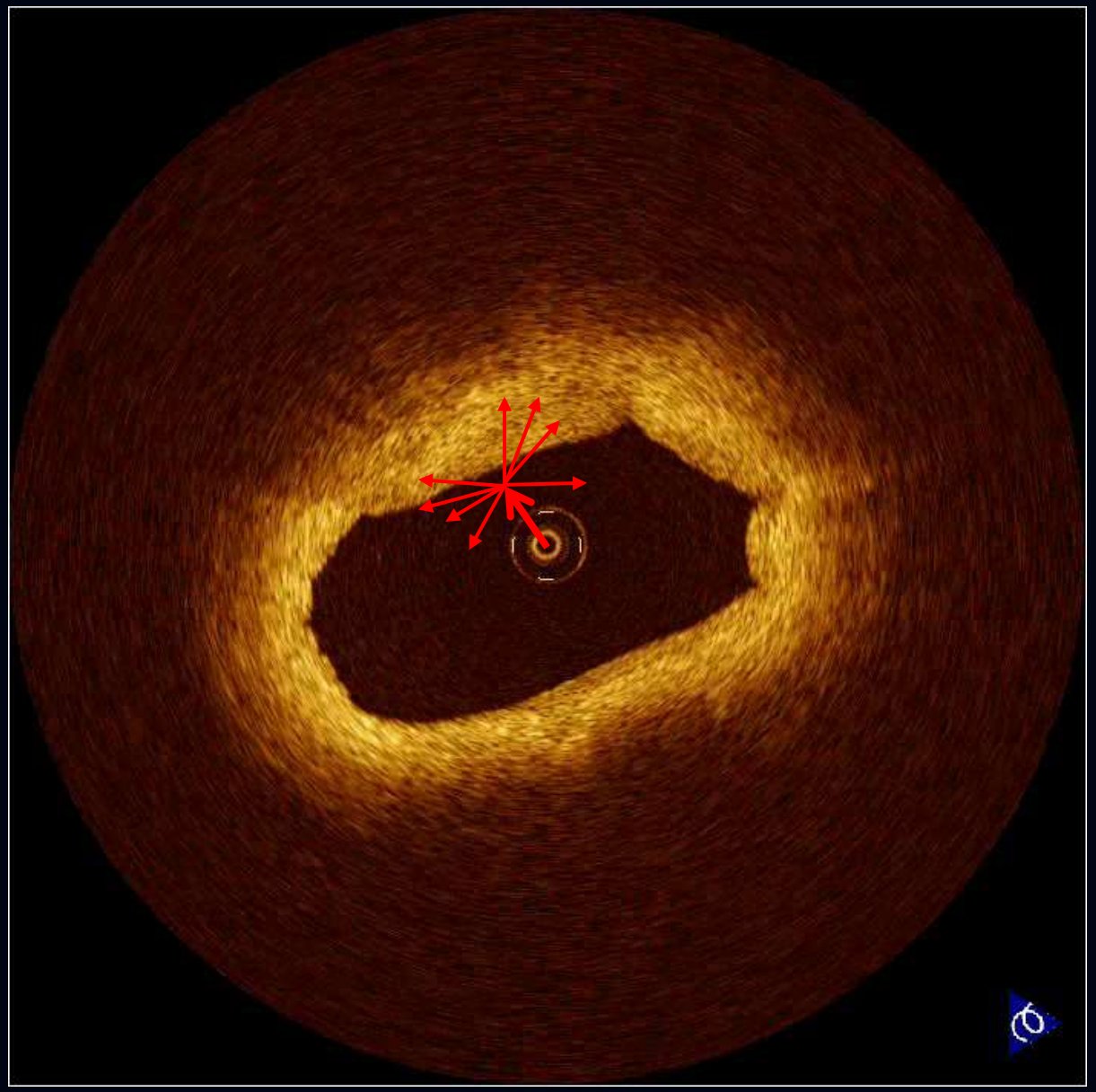


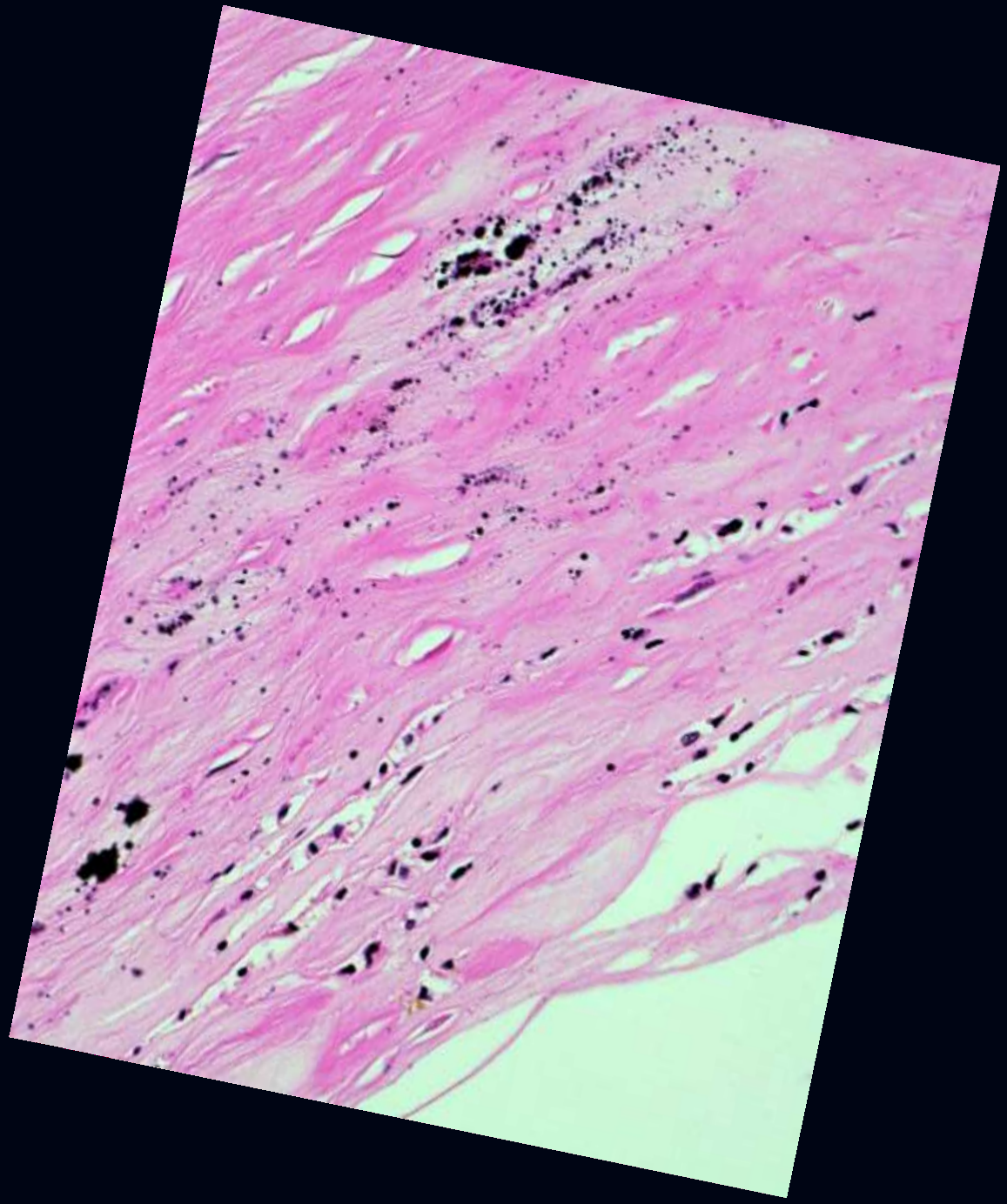


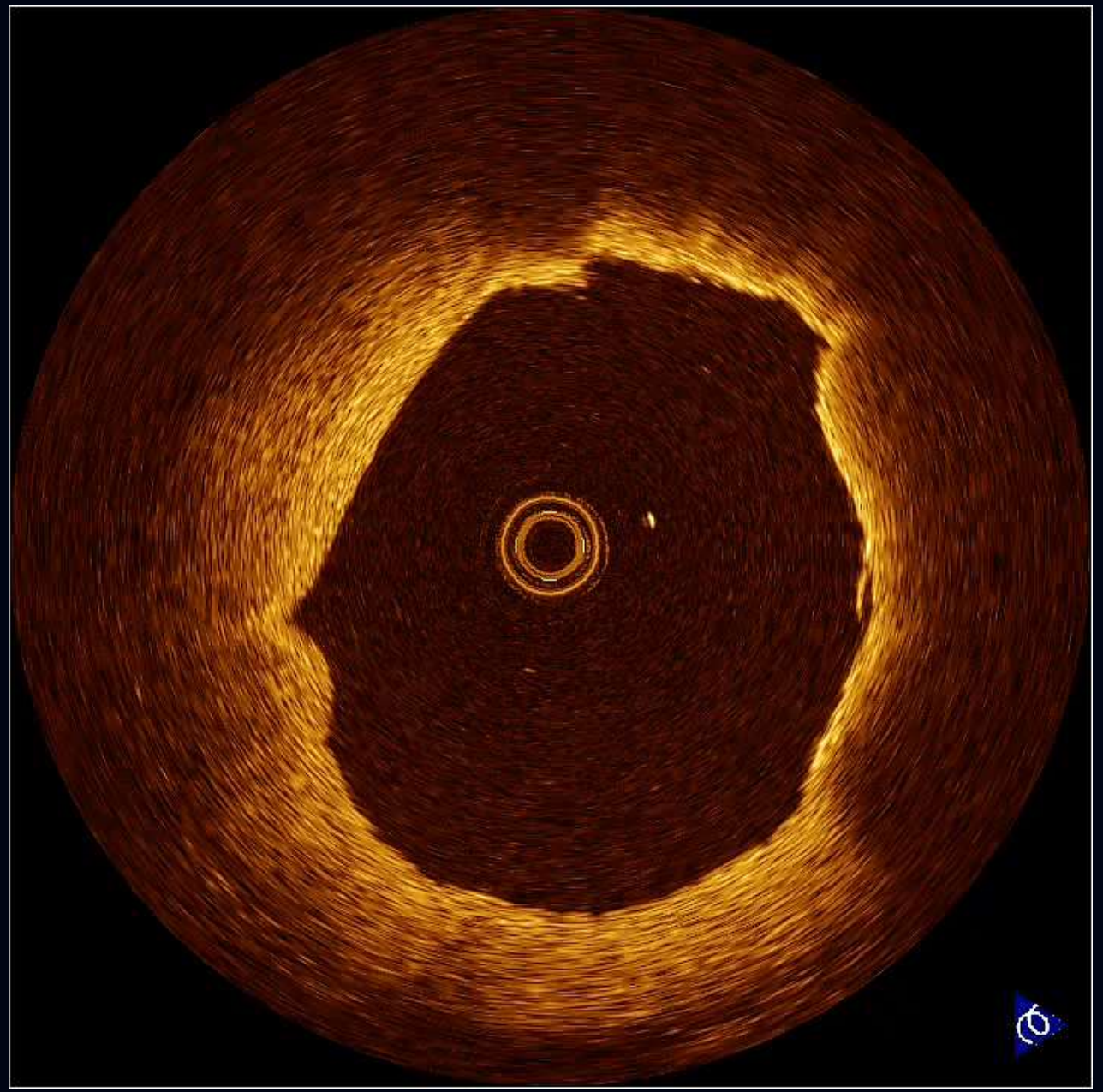


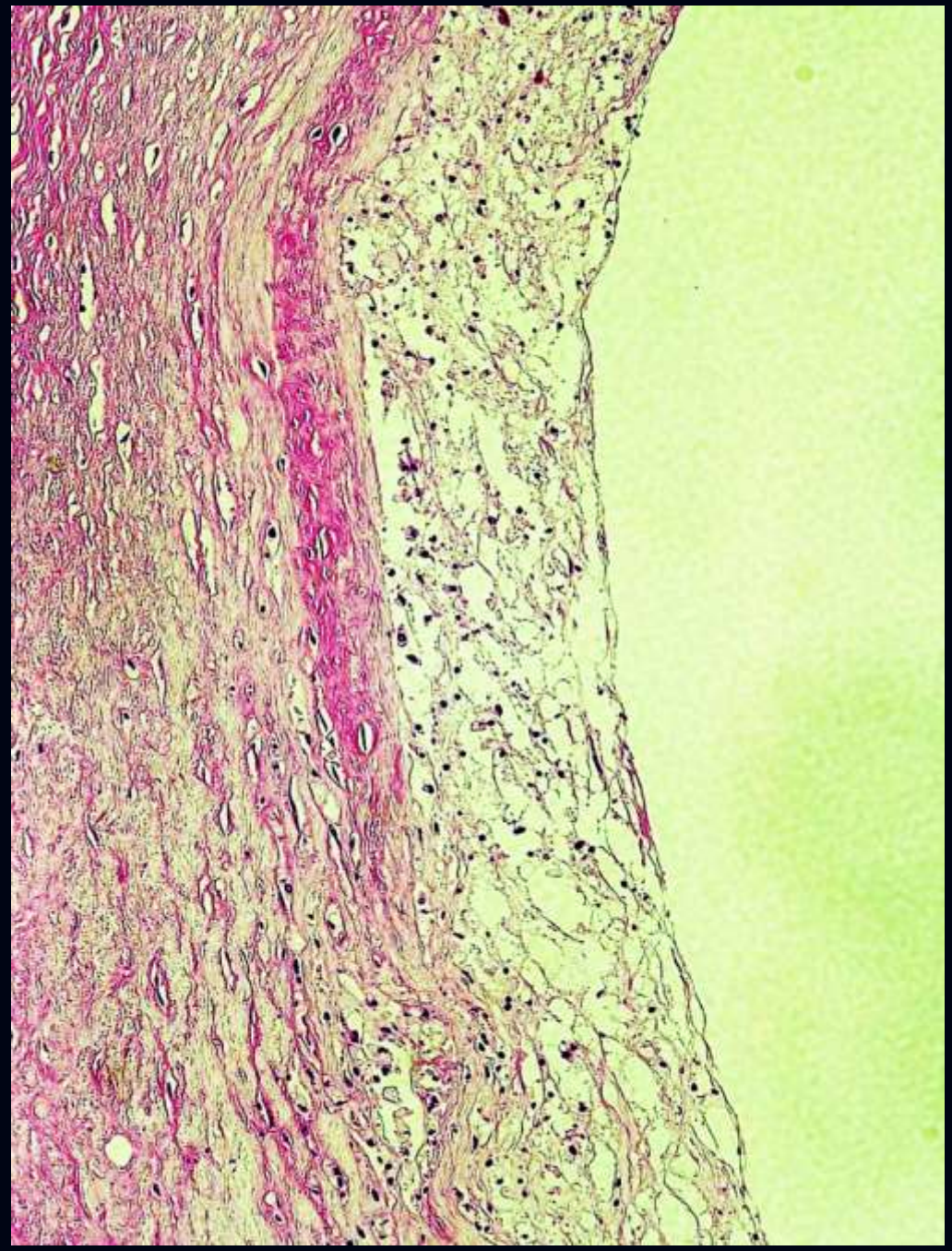


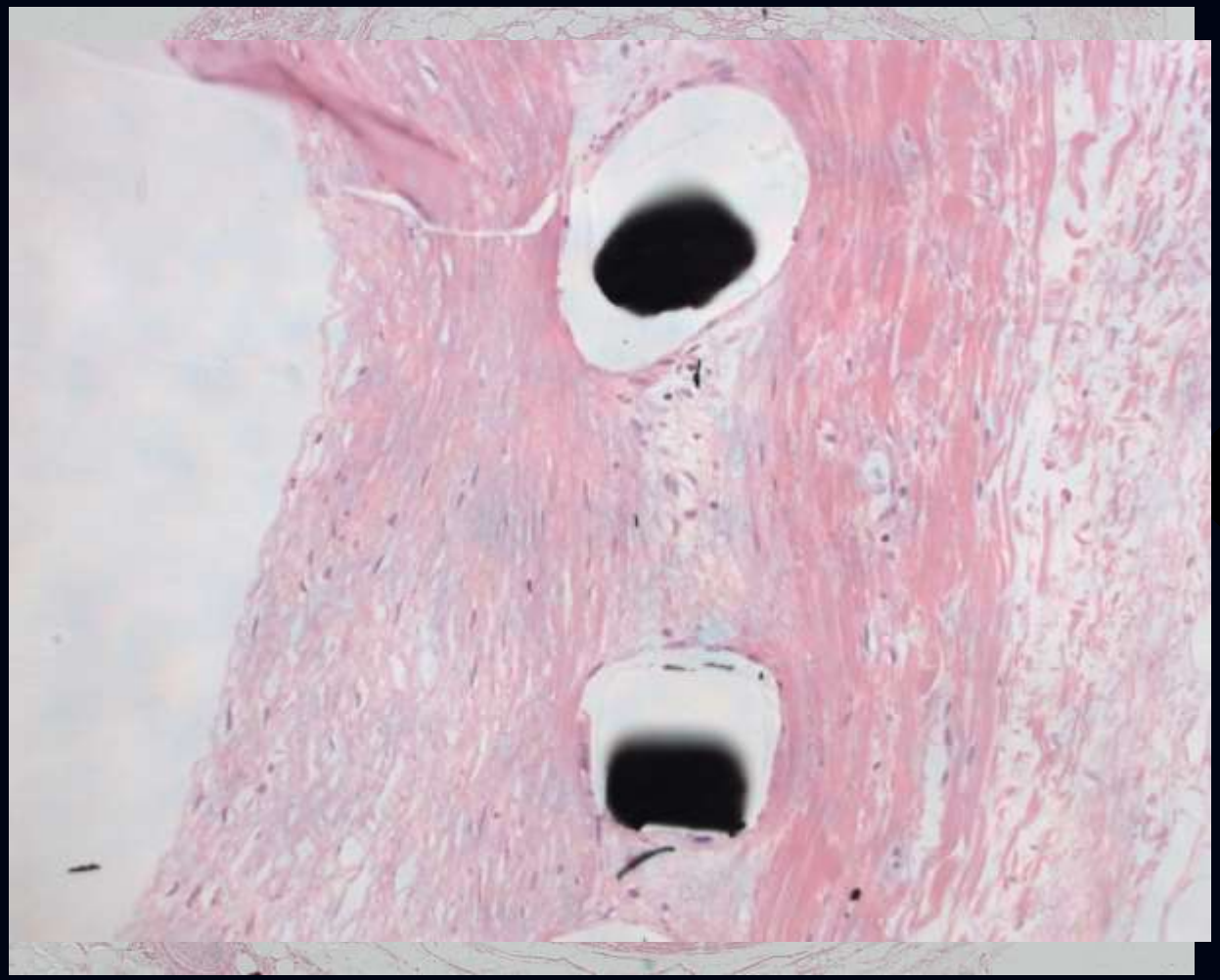


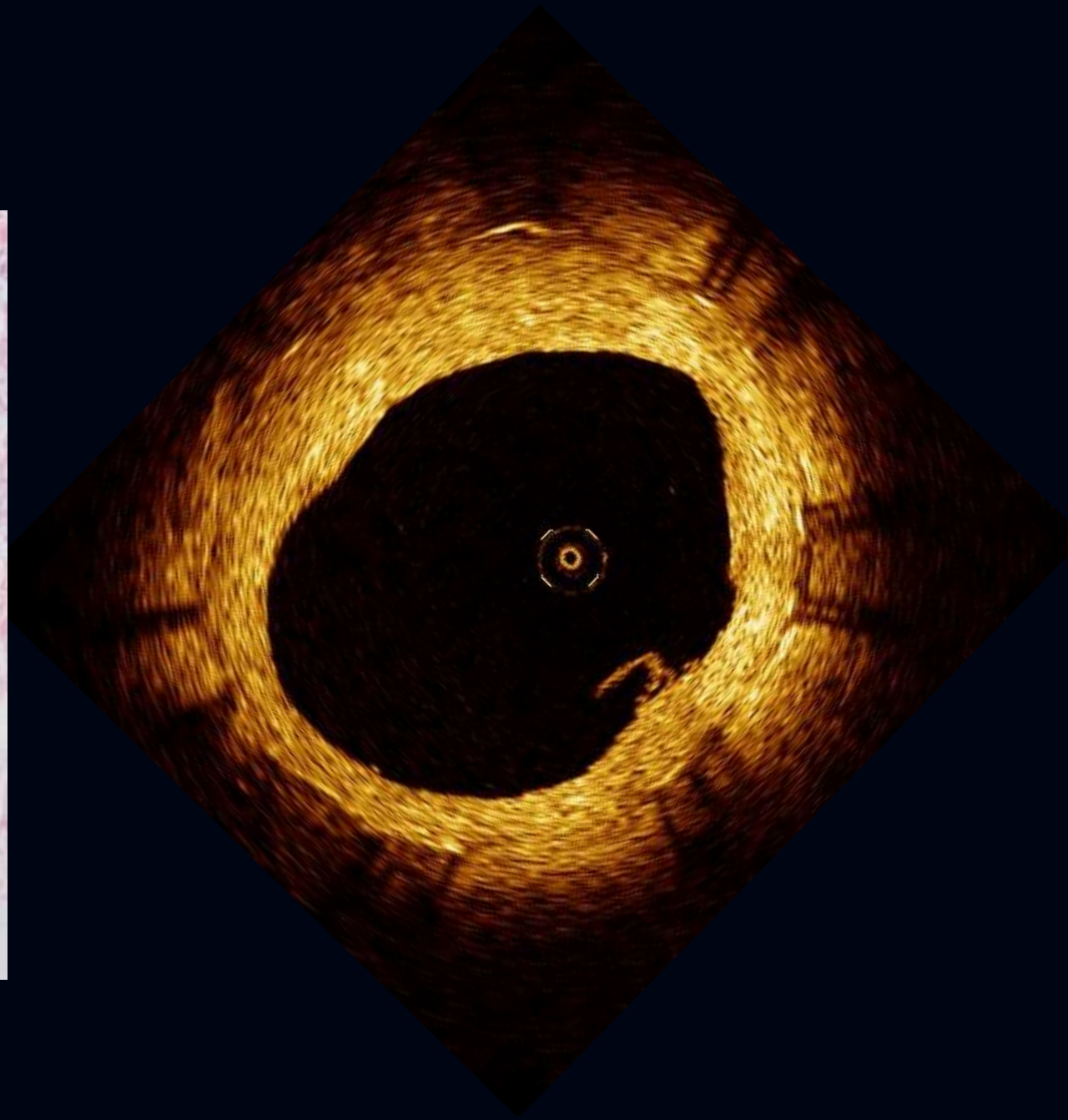


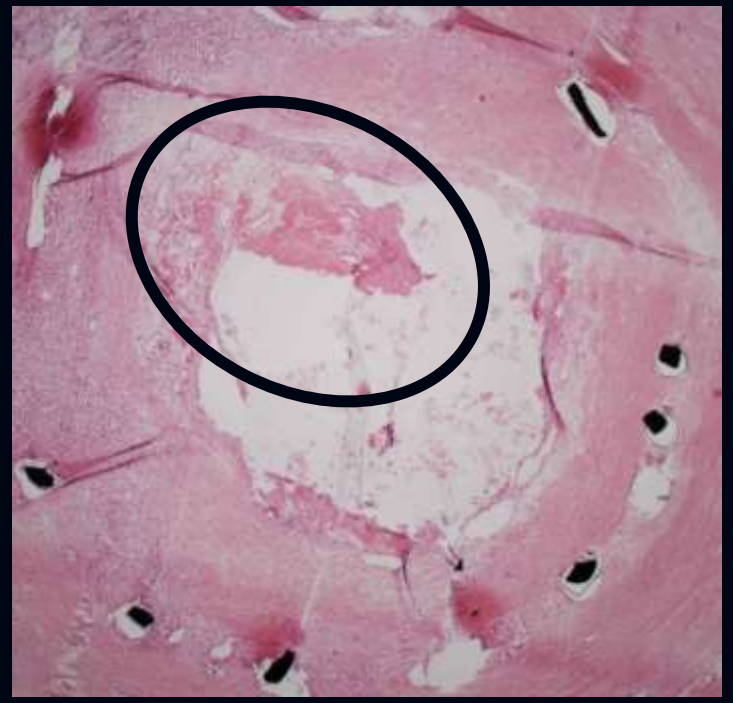


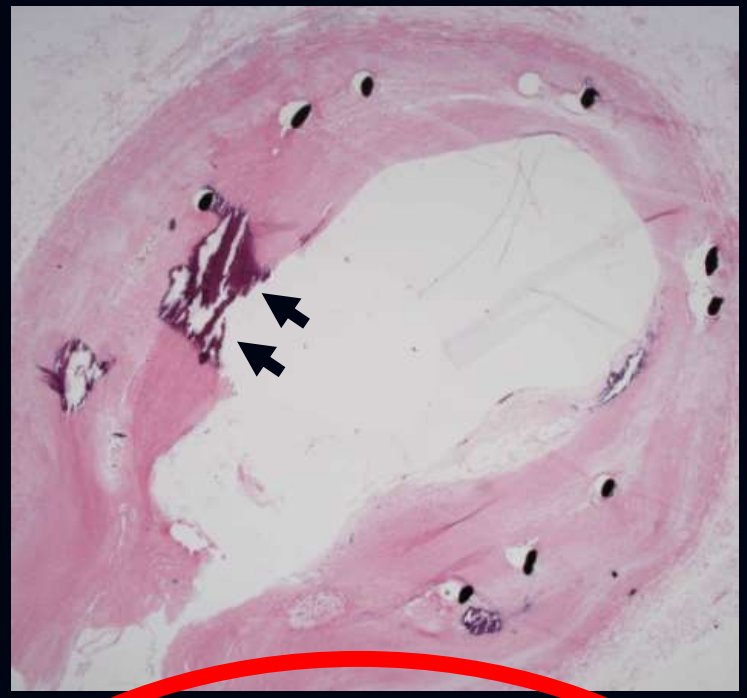


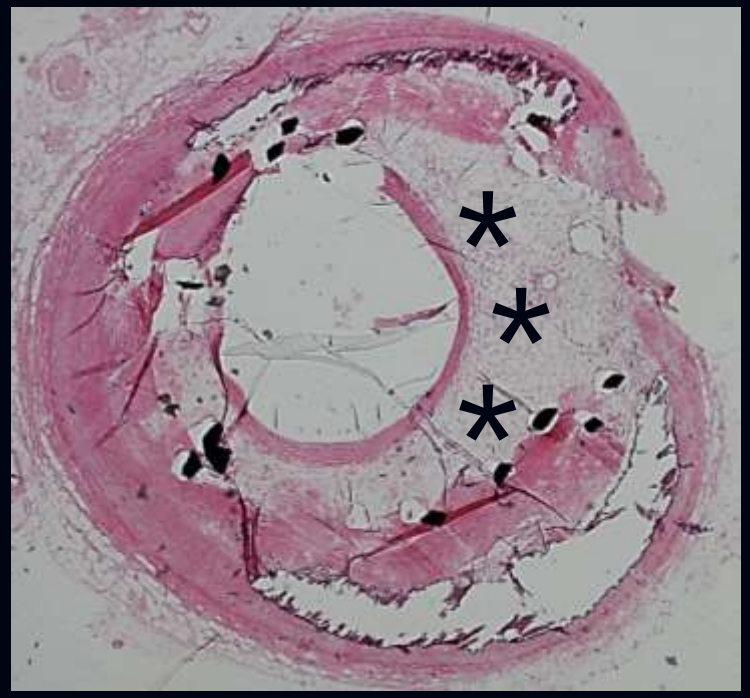


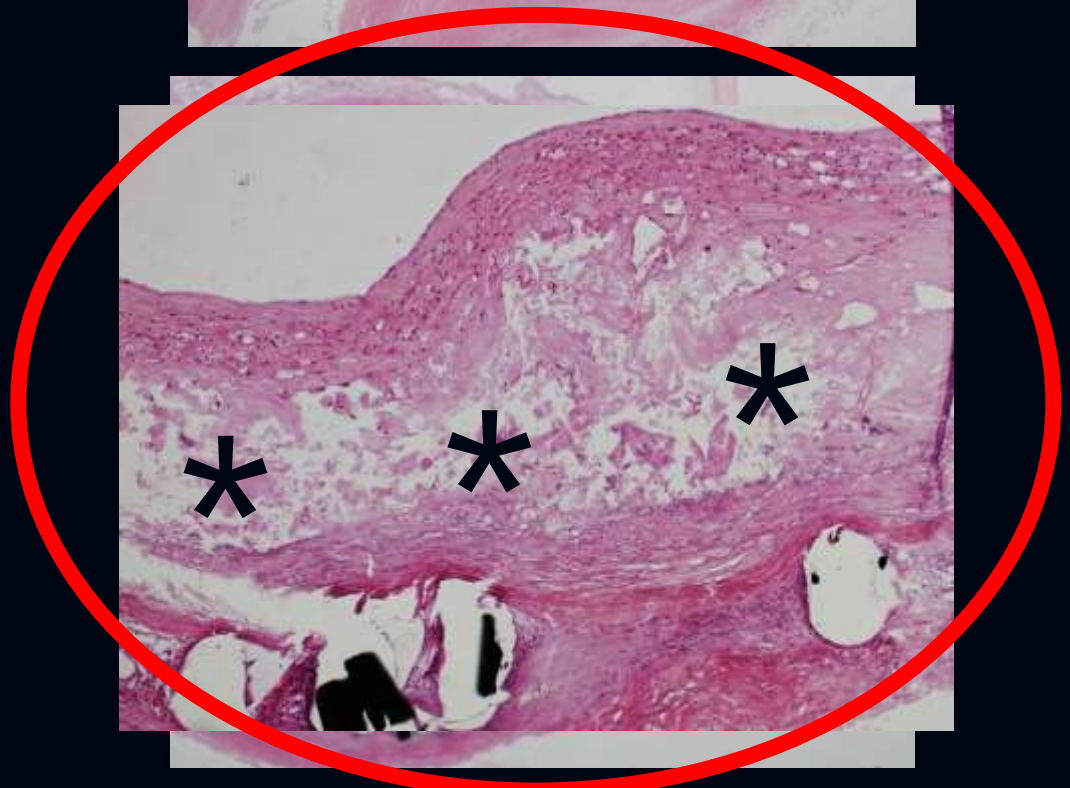


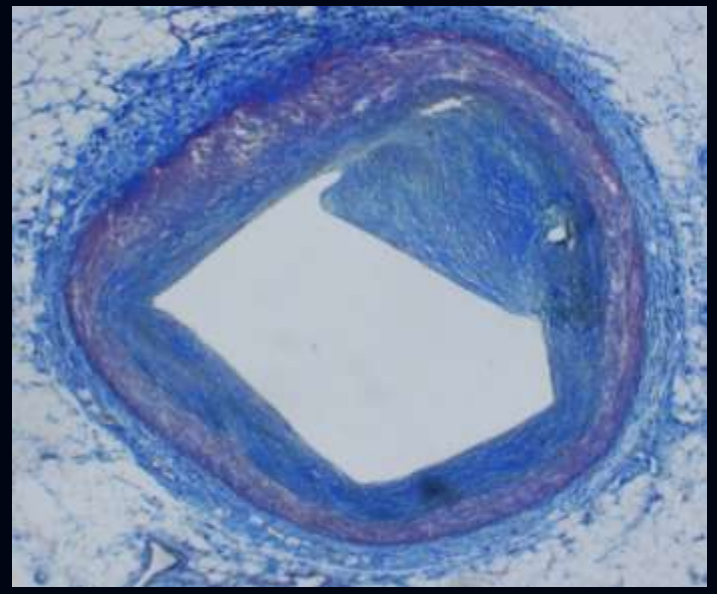


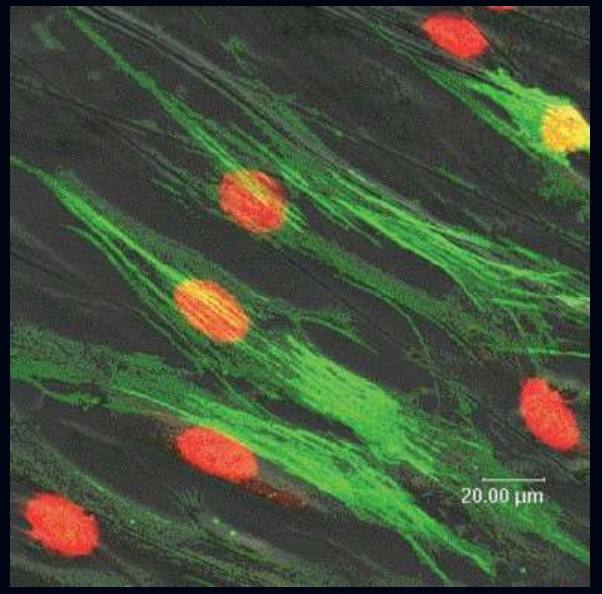




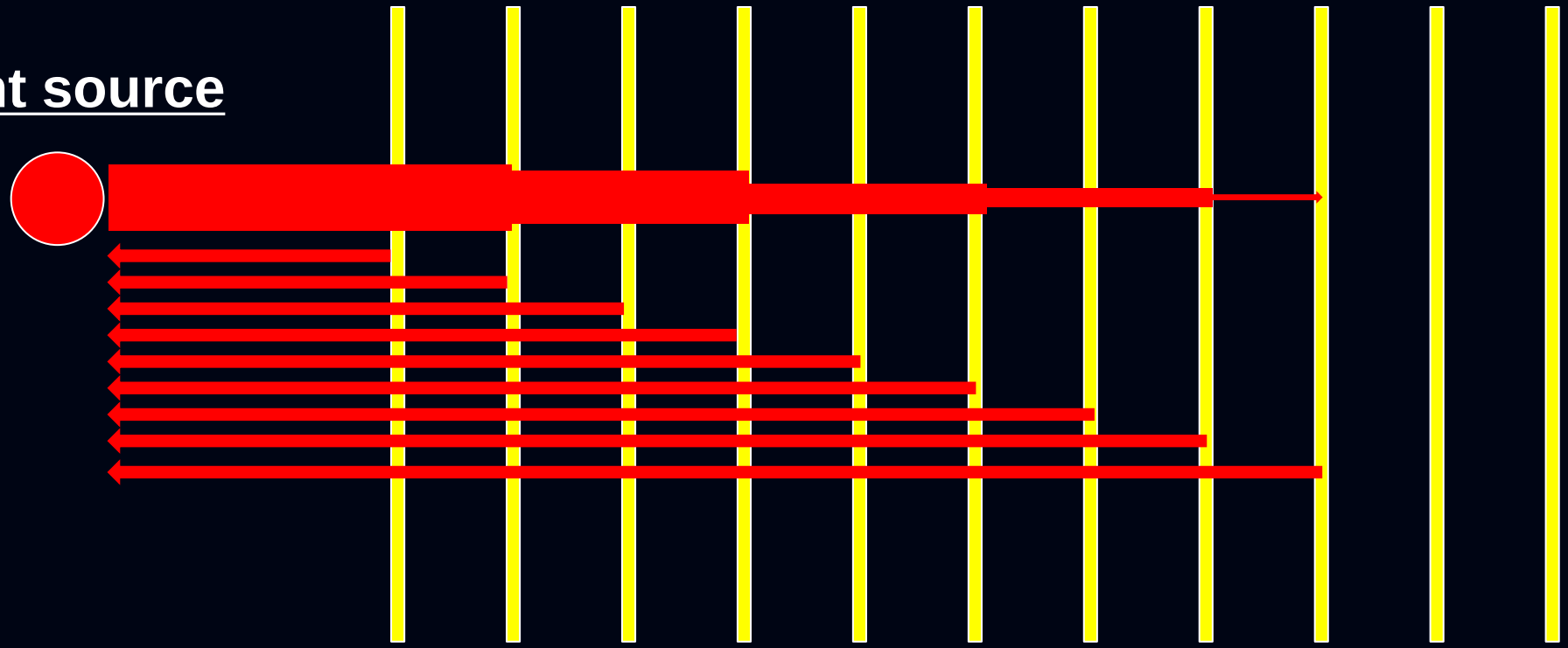


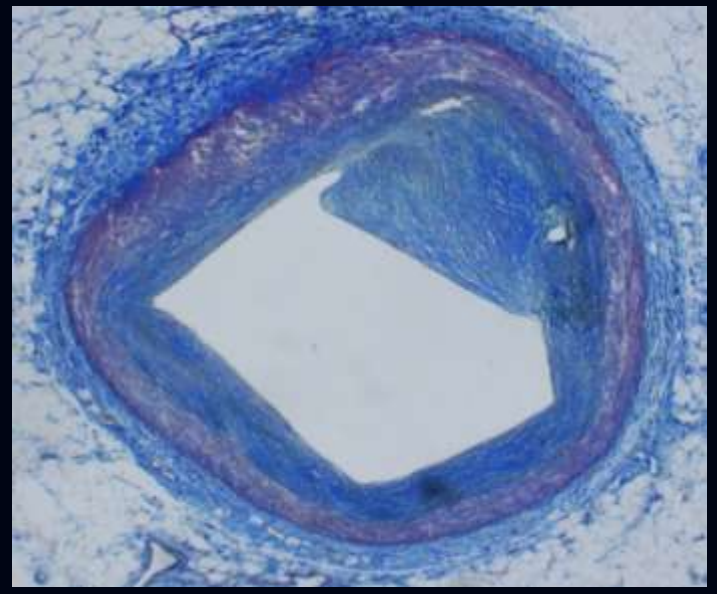


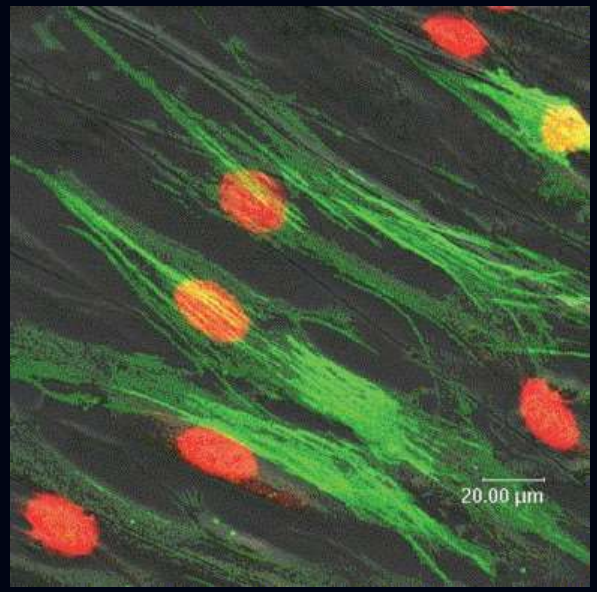


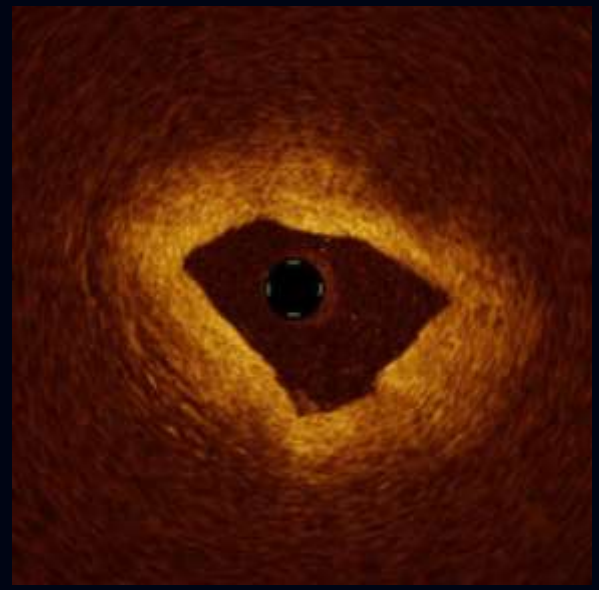


Light source









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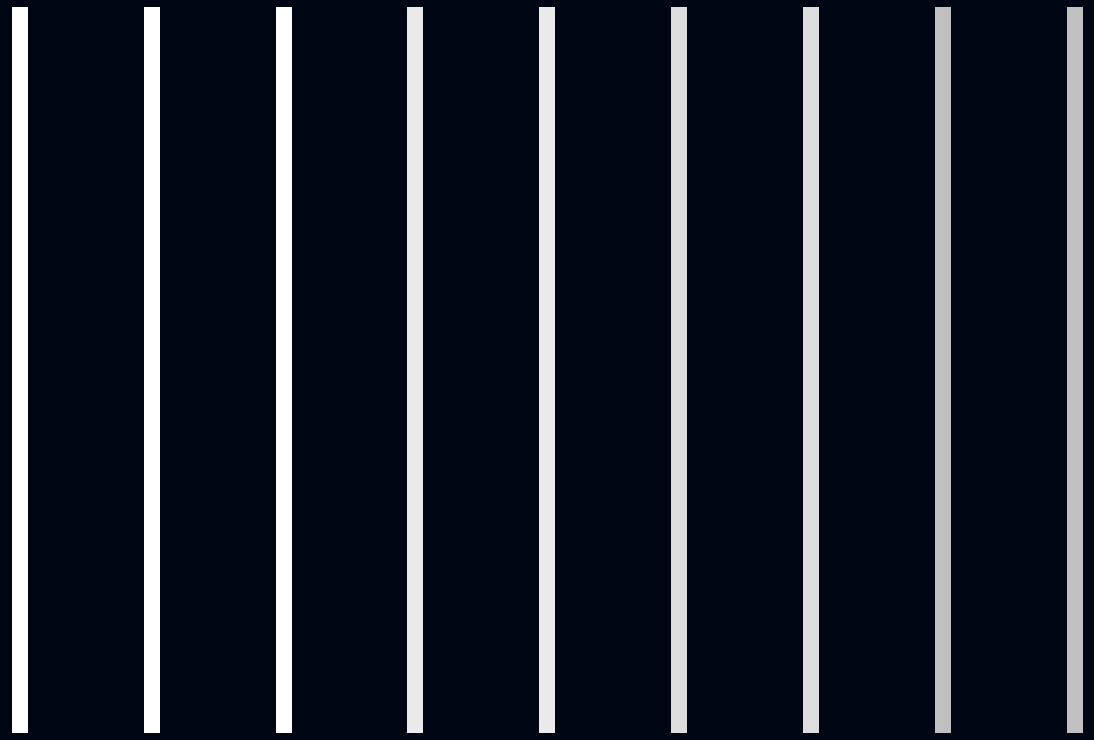
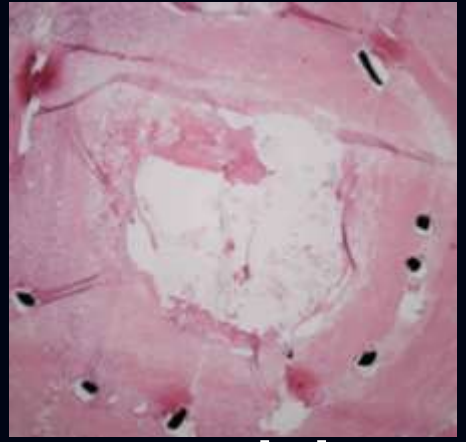
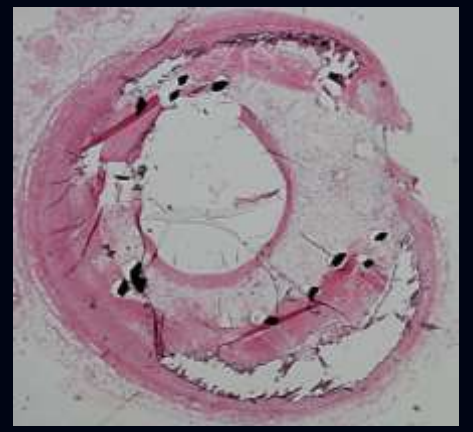


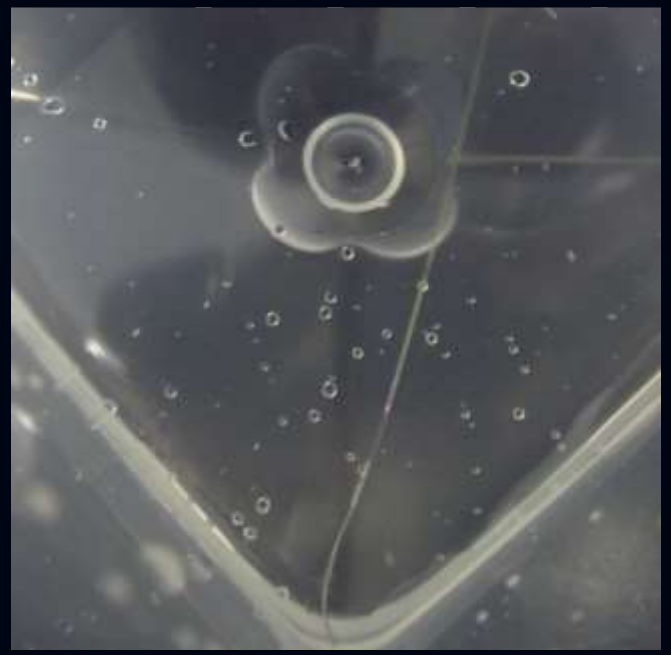


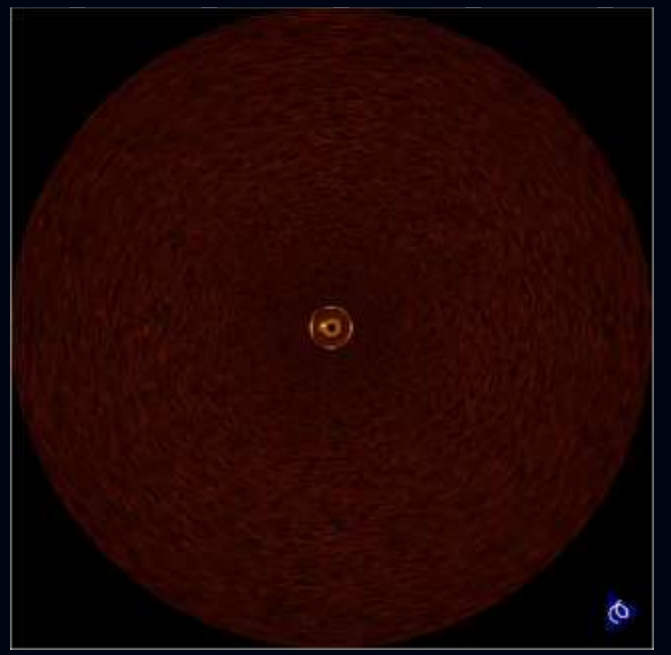
Extracellular matrix
（e.g. fibrin, proteoglycan）

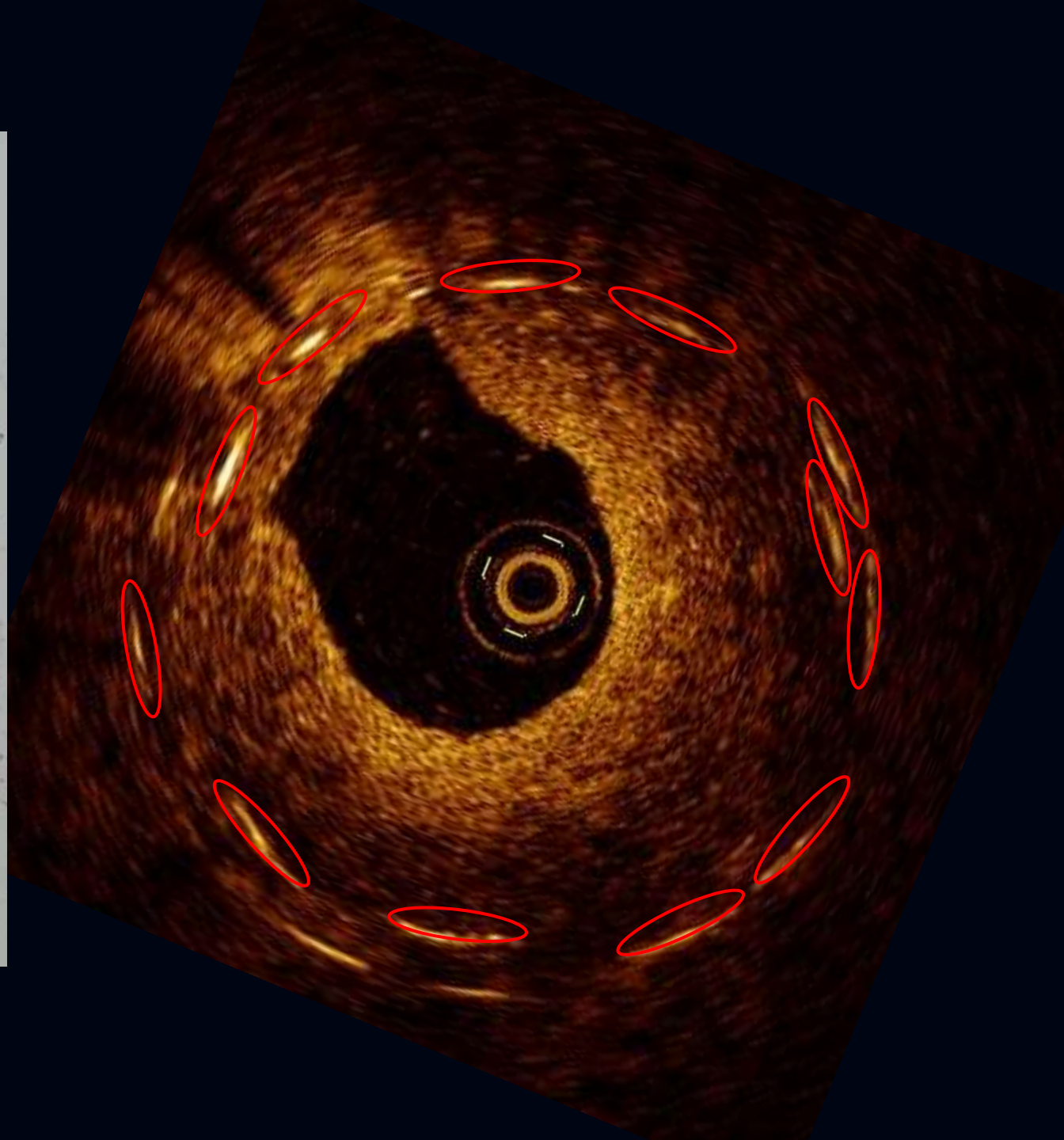


Light source

Light signal exists





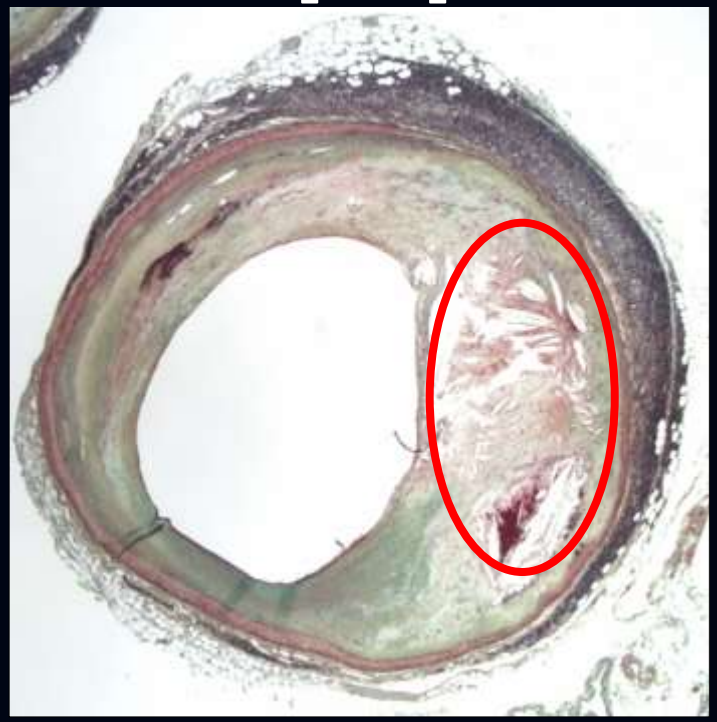


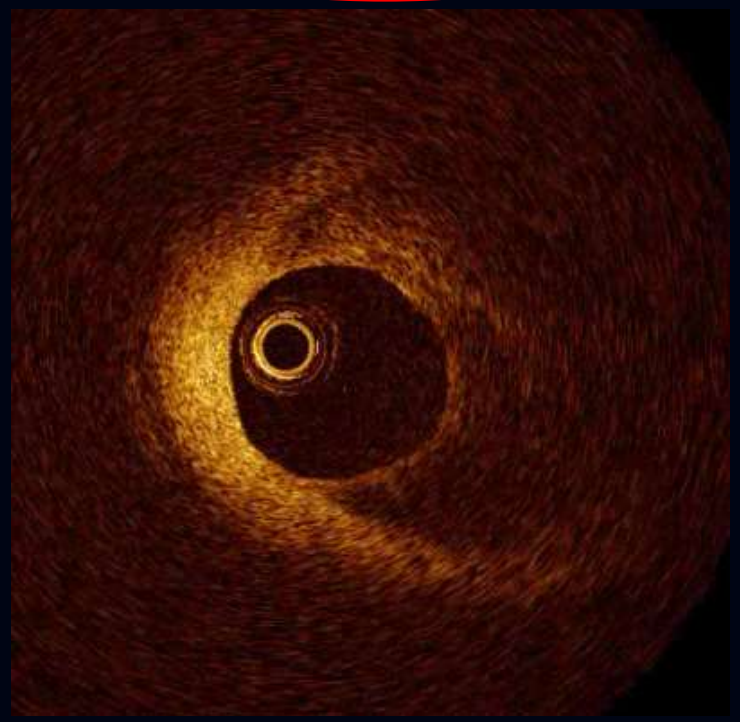
Lipidic tissue

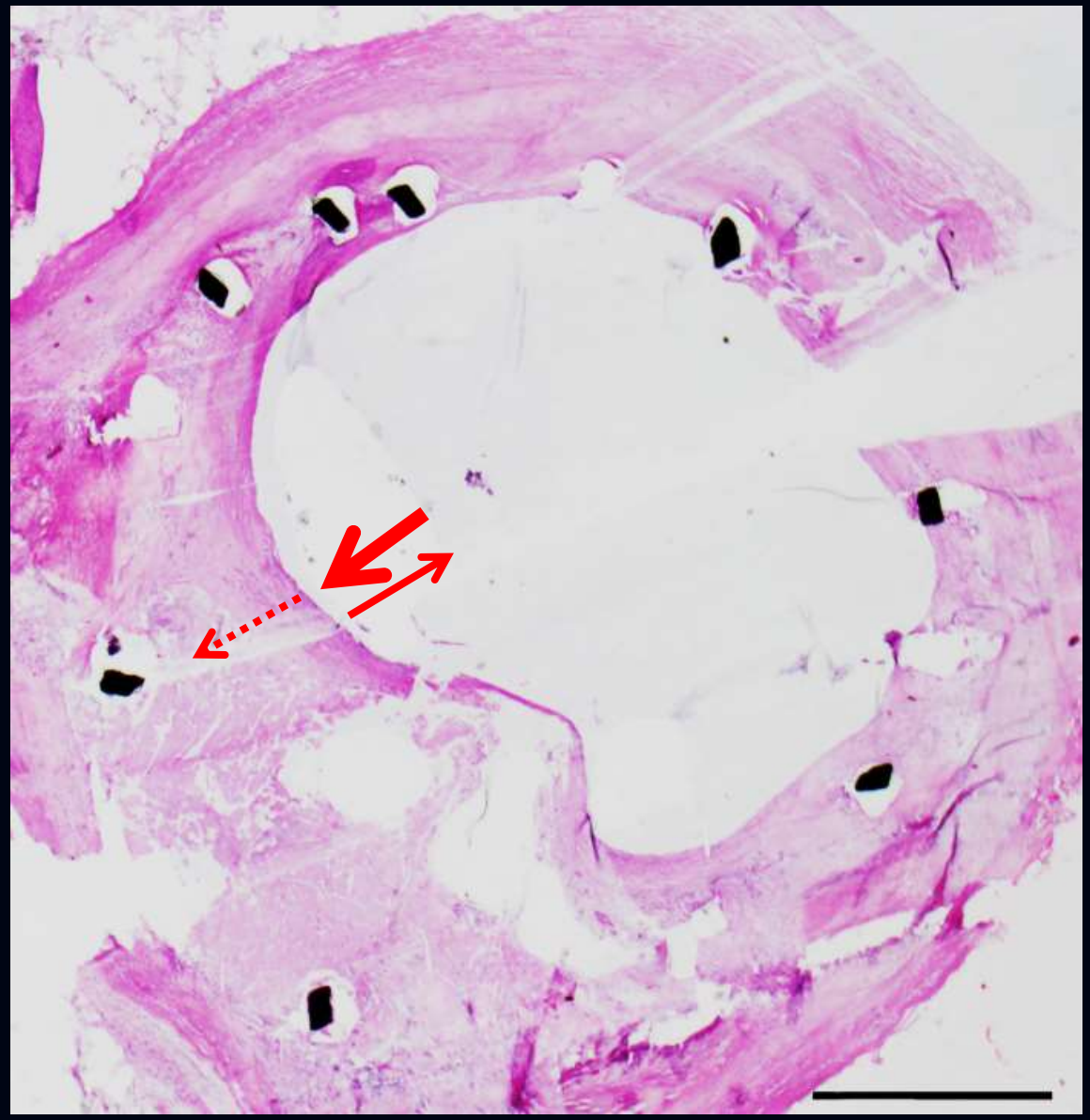
Lipid
(necrotic core)

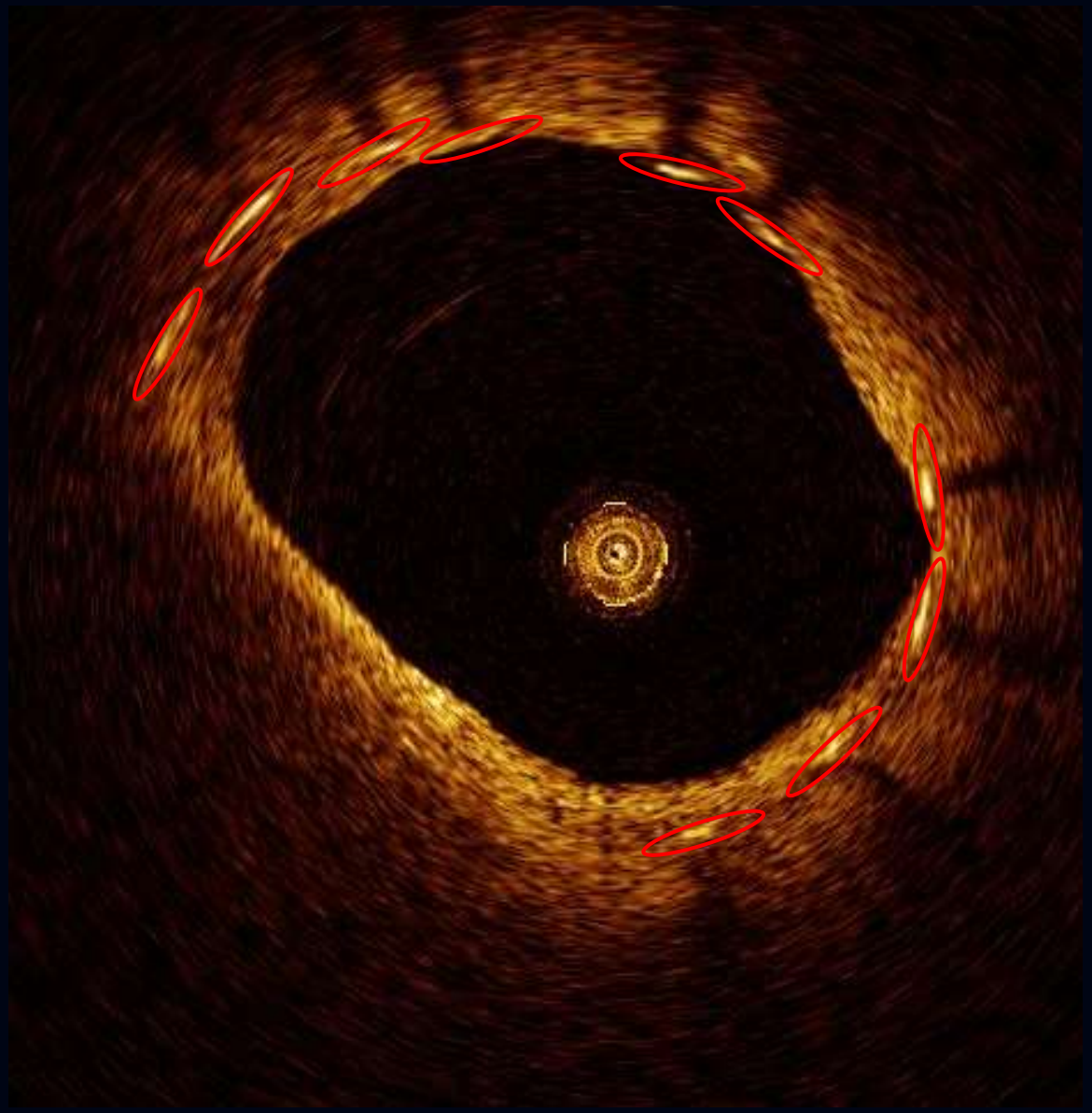
Light source

No light signal



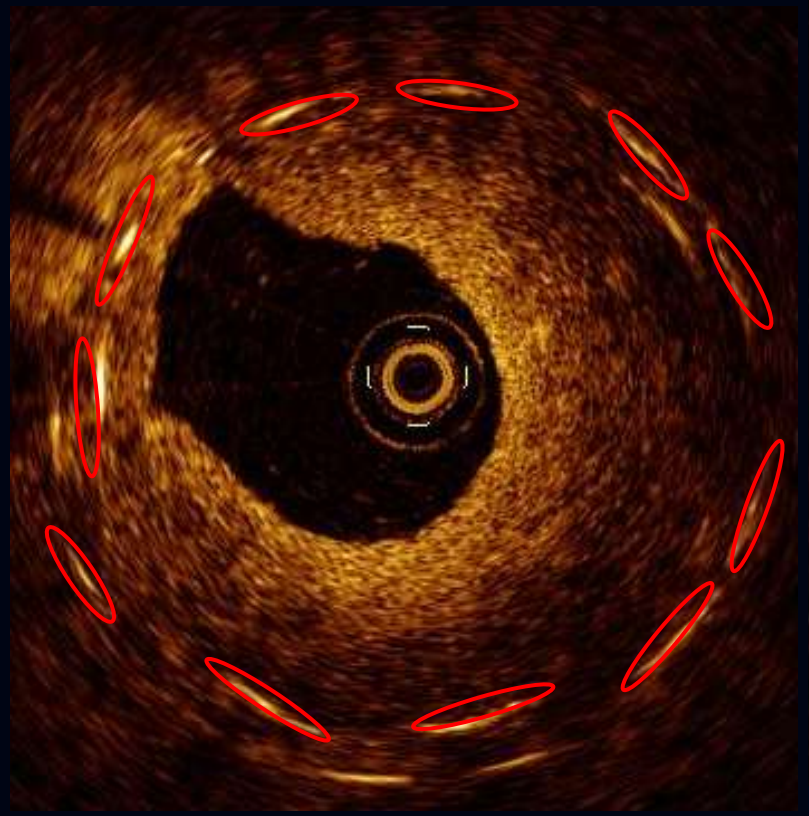






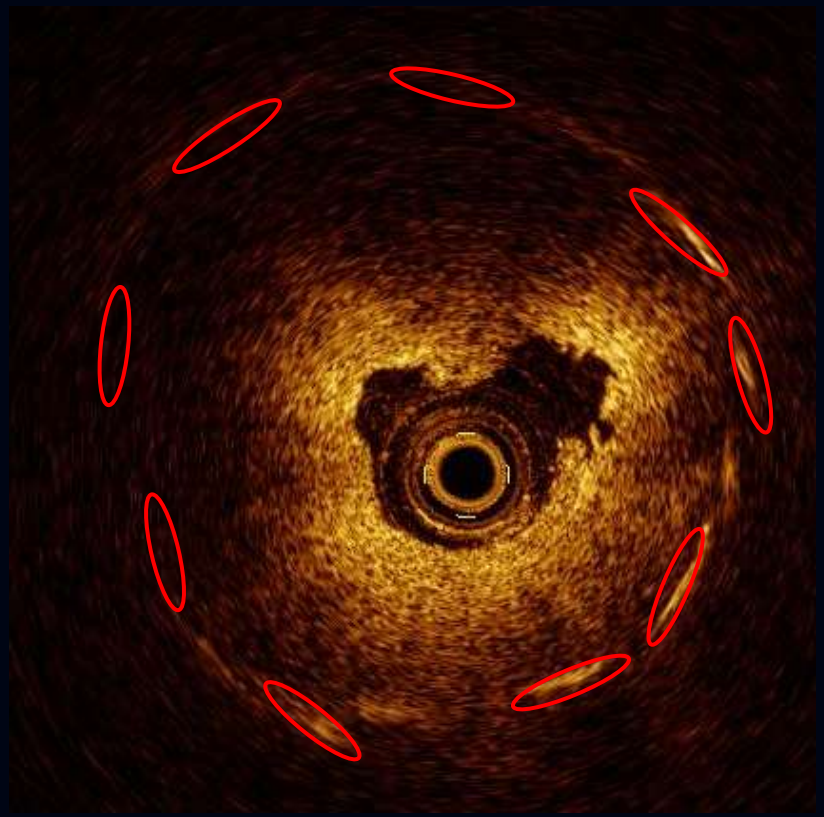
Stent struts behind low intensity tissue are…

Organized thrombi



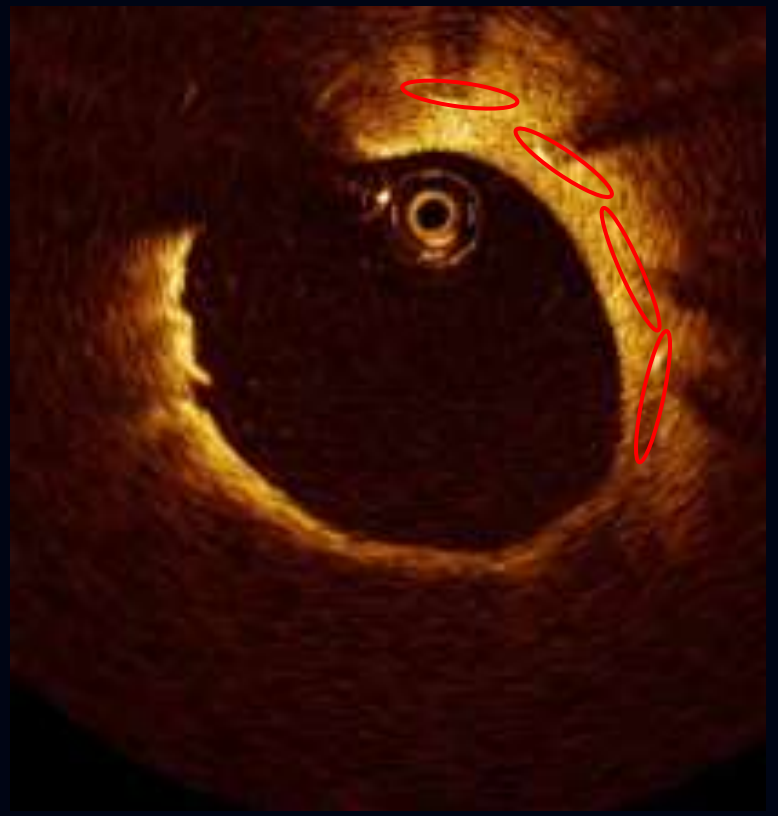
Visible

Fibrin



Visible

Necrotic core



Invisible

- Atherosclerotic lesions in native coronary arteries are heterogeneous, and OCT light signals are attenuated not only by lipid component
- Necrotic core formation within neointima can be accurately identified on OCT by analyzing the visualization of stent struts behind low intensity area