



PATHOLOGY OF THROMBOTIC MICROANGIOPATHY

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Disclosure of Interests

- GlaxoSmithKline - consultancy
- Biogen Idec - consultancy
- Achillion Pharmaceuticals - consultancy

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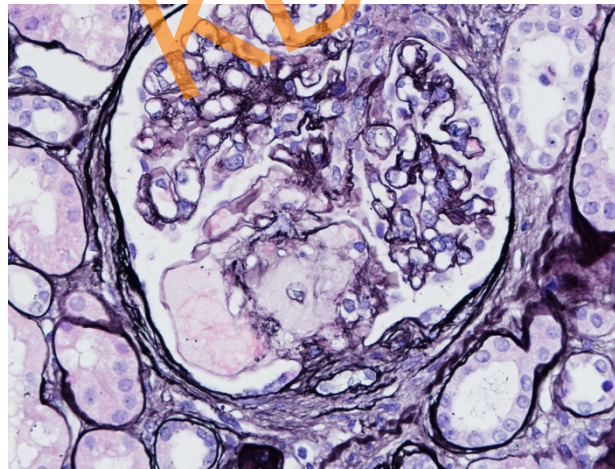
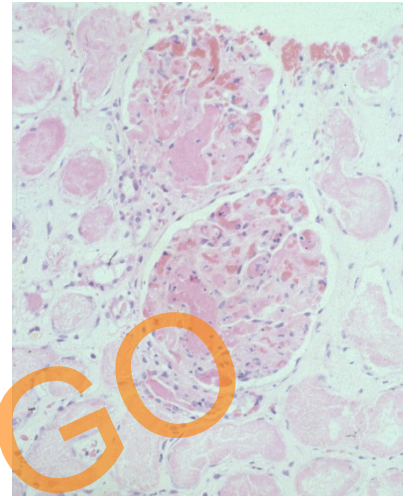
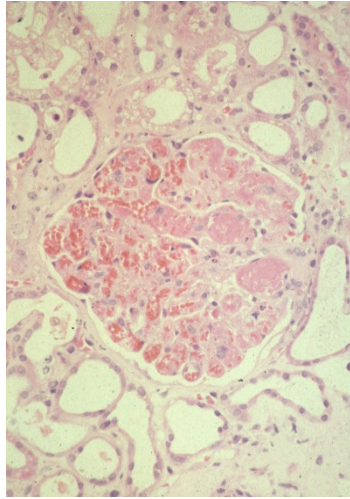
TMA - morphology

Range of morphological changes in the kidney vasculature in response to endothelial injury

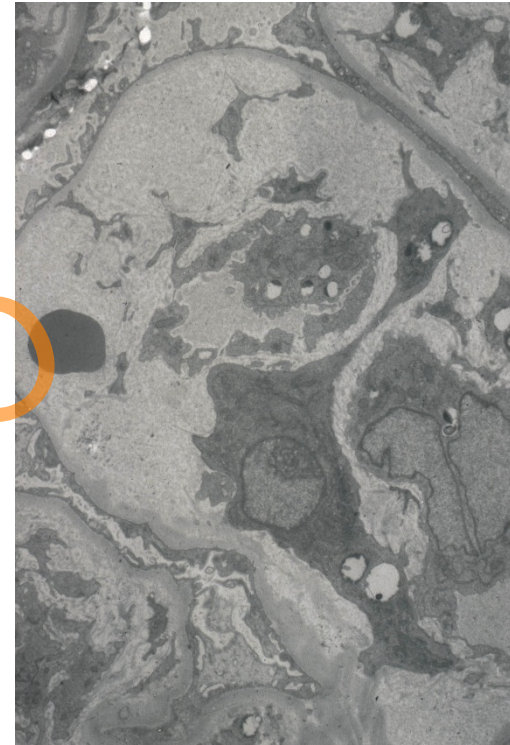
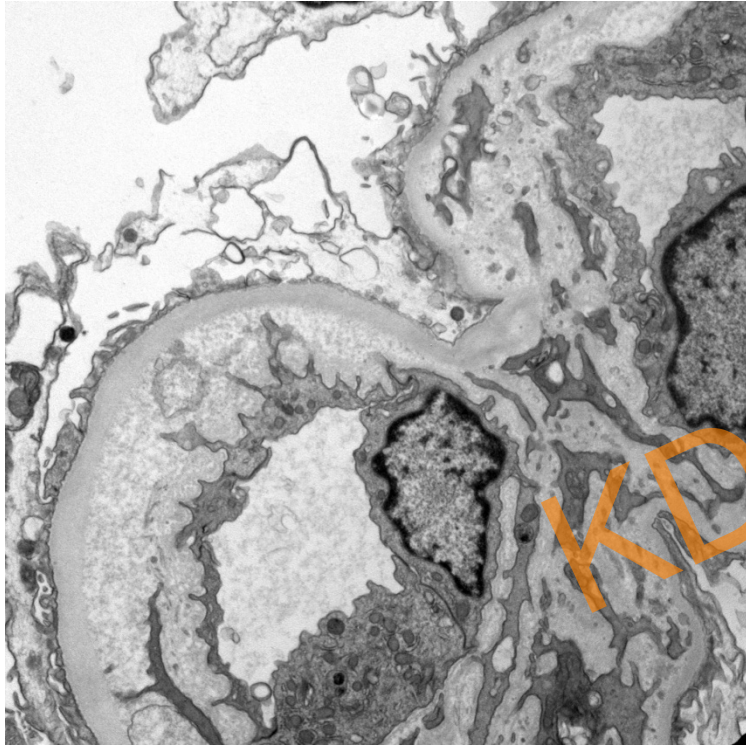
May involve glomeruli, arterioles and arteries

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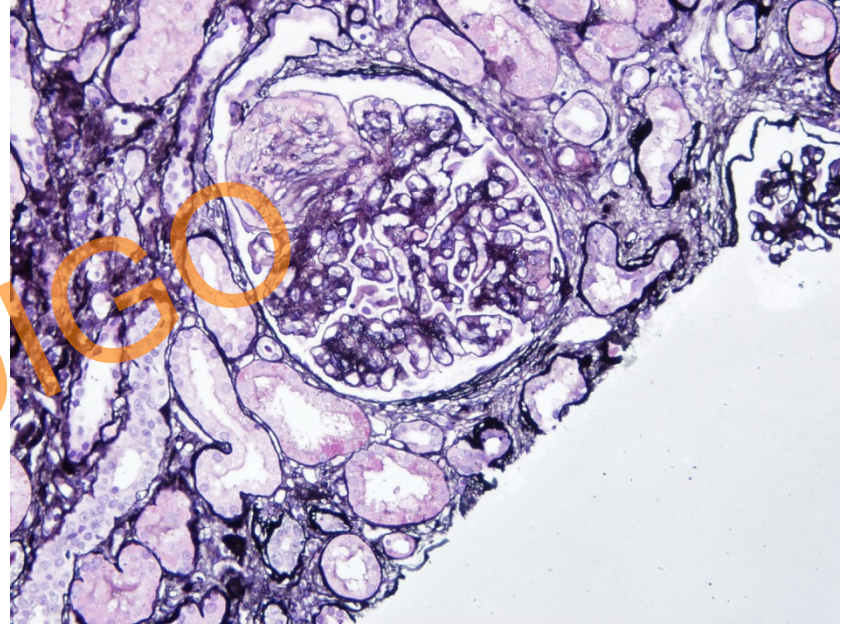
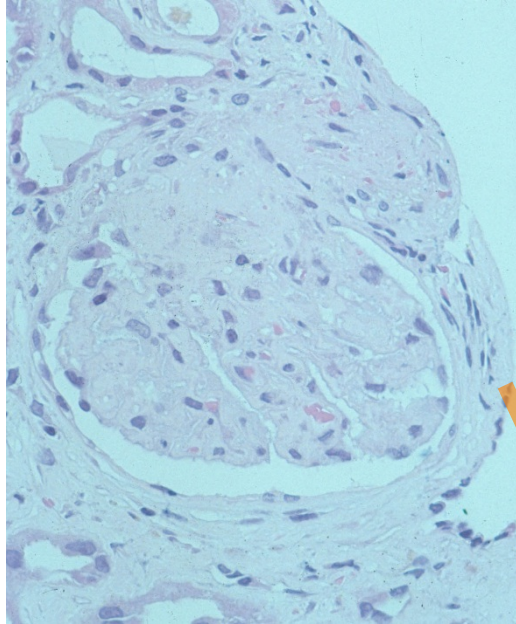
Glomeruli – acute lesions



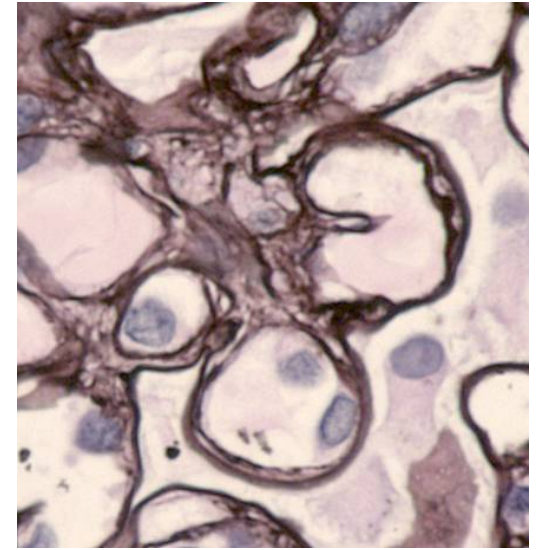
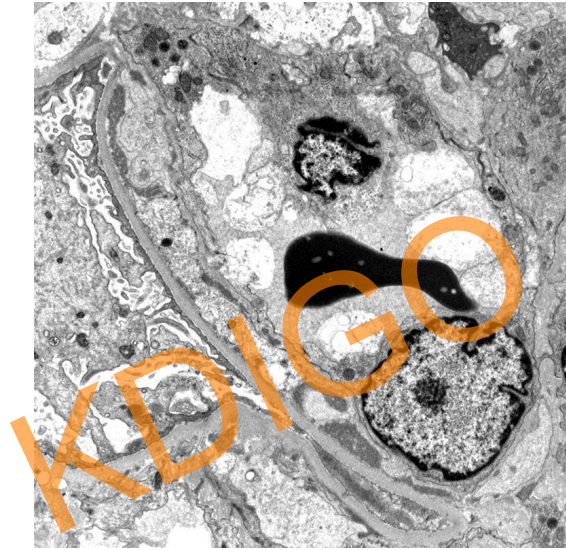
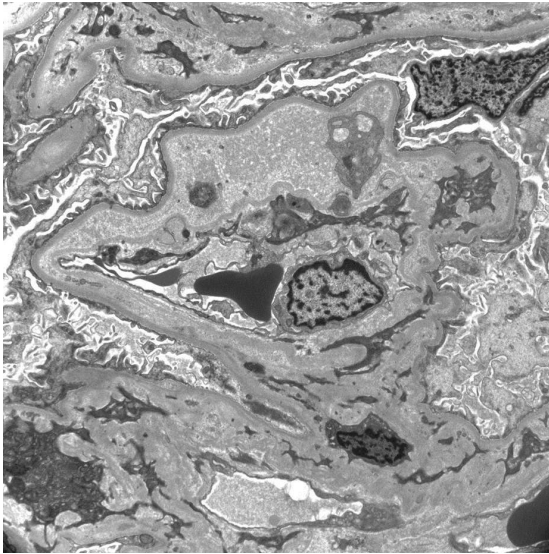
Glomeruli – acute lesions



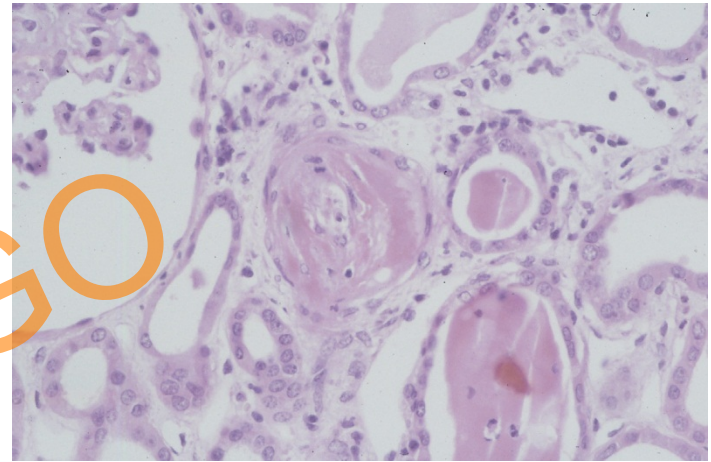
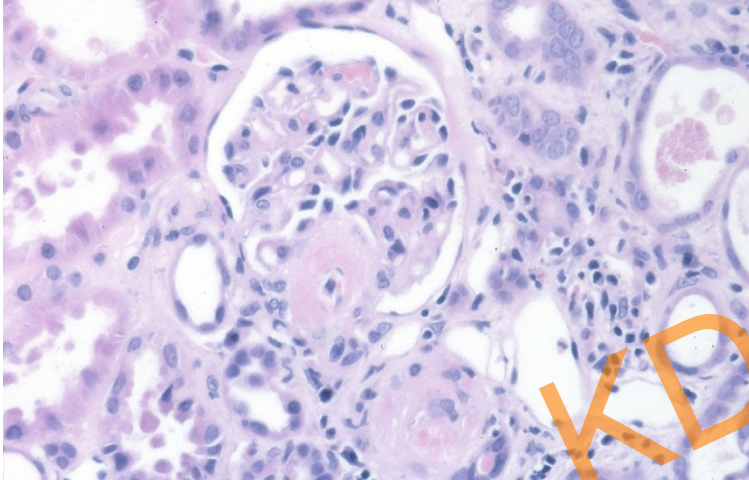
Glomeruli- chronic lesions



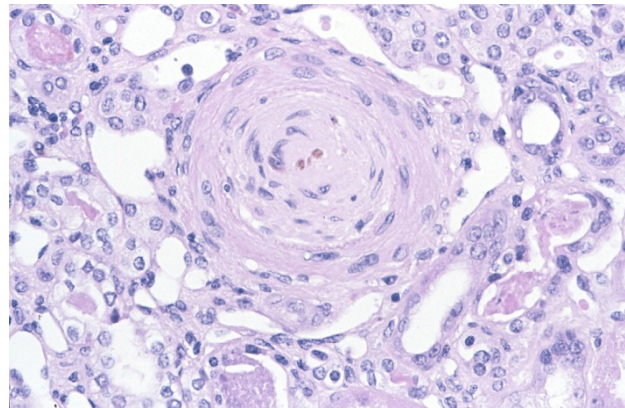
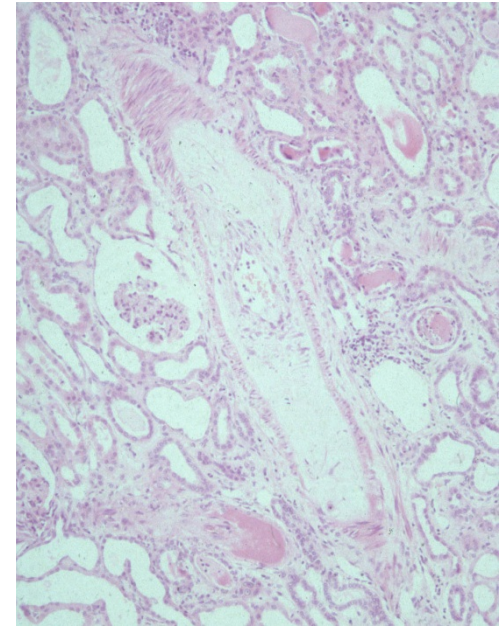
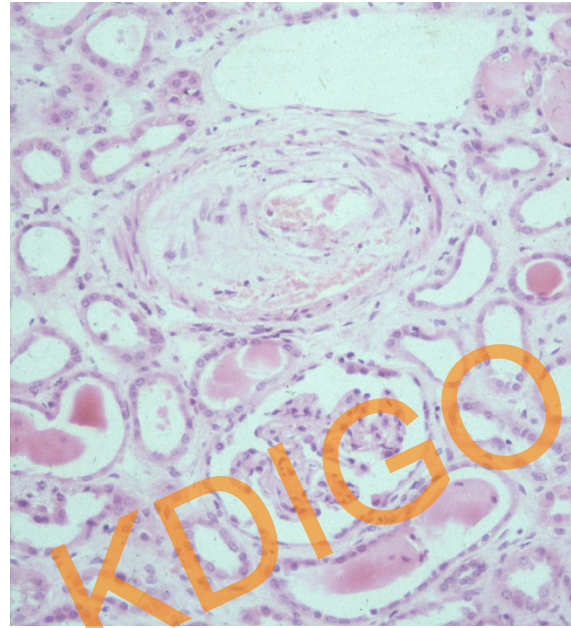
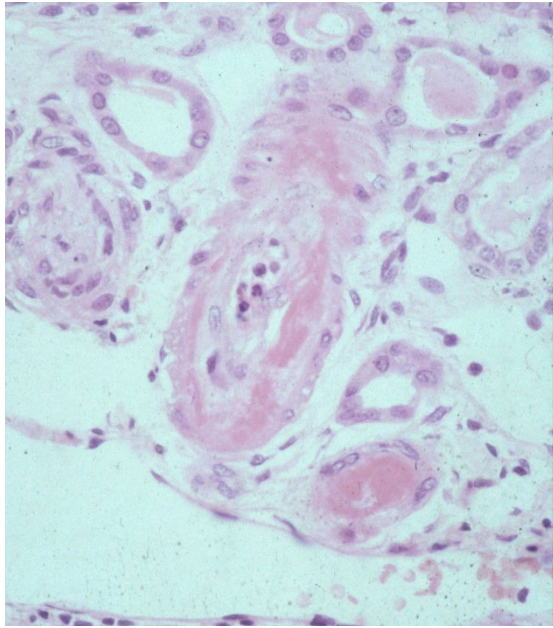
Glomeruli- chronic lesions



Arterioles



Arteries



- 1. Nomenclature of TMA: is it a problem that TMA encompasses changes that are not 'thrombotic' (e.g., glomerular subendothelial expansion, mesangiolytic and myxoid arterial intimal thickening)?

- 2. What are the morphological differences between TMAs of different etiology?

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2. What are the morphological differences between TMAs of different etiology?

- Shiga toxin associated HUS shows only glomerular involvement
- TTP has platelet rich thrombi
- TMA due to malignant hypertension shows predominant vascular involvement
- Does C5b-9 staining differentiate causes due to primary complement activation?

- 3. What is the distinction between TMA associated with malignant hypertension as opposed to TMA due to other causes with secondary hypertension?

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3. What is the distinction between TMA associated with malignant hypertension as opposed to TMA due to other causes with secondary hypertension?

- Possibly more chronic vascular changes in TMA due to malignant hypertension
- Can C5b-9 staining help?

- 4. What are the morphological features of acute and chronic TMA lesions?
- Is there an entity of chronic TMA due to complement abnormalities that leads to chronic renal impairment without acute episodes?