

PAT632 NMS/GU Pathology

Points to Remember for your Board Exams

What are the most common aneurysms found in the CNS?

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- Berry aneurysm
- Atherosclerotic aneurysm
- Hypertensive aneurysm

What are the cerebral
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(AVMS)

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- They result from defective formation of capillaries in a normal part of the brain
- The arterial blood, therefore, enters **DIRECTLY** into the veins
- Typical AVMs consist of tortuous arteries & veins (“worm-like”)
- AVMs have **HIGH BLOOD FLOW**; they often **PULSATE**; & they might be a source of **PARENCHYMAL/SUBARACHNOIDAL BLEEDING &/or SEIZURES**

What are the most important
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(i.e. hemorrhagic stroke)

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- Hypertension
- Coagulation abnormalities
- Rupture of berry aneurysms

What are the most common sites of hypertensive cerebral hemorrhages?

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- Basal ganglia–thalamus (65%)
- Pons (15%)
- Cerebellum (10%)

What are the pathological consequences of global cerebral ischemia?

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- Generalized reduction of available oxygen that affects the **WHOLE** CNS may cause:
 - Transient ischemic attacks (TIAs)
 - Neuronal death
 - Watershed infarcts
 - Laminar necrosis

What are the most important causes of occlusion of cerebral arteries?

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- Atherosclerosis
- Thromboemboli
- Hypercoagulable states

What is the most common
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- Thromboemboli is the major cause
- Thromboemboli originate from:
 - The heart (valvular disease, arrhythmias with atrial thrombosis, mural thrombi over infarcts)
 - Atheromatous plaques in large arteries
- Less common causes are:
 - Septic emboli from the endocardial vegetations
 - Foreign material in drug addicts
 - Air emboli & fat emboli occur ONLY under certain specific conditions