amyloidosis

- deposition of extracellular (insoluble) fibrillar proteins
- These abnormal fibrils are produced by the aggregation of misfolded proteins (which are soluble in their normal folded configuration).

Amyloid = several proteins that are chemically different (not a single protein) BUT share the same physical characteristics ⇒ misfolded → so aggregate → so insoluble → so deposited extracellularly

- Amyloid is deposited in the extracellular space in various tissues and organs of the body

- These fibillary proteins are responsible for tissue damage and functional compromise

* Subarachnoid hemorrhage

- Most common cause: ruptured berry aneurysm.
- Other causes: vascular malformations, trauma, tumors, hematological disturbances.

Ruptured berry aneurysm

Berry aneurysm → happen in circle of Willis

- Rupture happens usually due to increased intracranial pressure.
- Sudden severe headache followed by loss of consciousness → due to massive subarachnoid hemorrhage
- 25-50% die
- Survivors: risk of recurrent bleeding

because aneurysms can be multiple

AV malformation

- Most common type of vascular malformation
- Males more than females
- Present at 10-30 years of age
- Symptoms: seizures and intracranial hemorrhage

Developmental abnormality
→ mass of vessels
→ can rupture and bleed

Morphology of AV malformation

- Network of disorganised vascular channels