Cerebral Amyloid Angiopathies (CAA)

CAA related strokes

- Usual vascular risks (↑ BP, lipids, HD risk)
- Cognitive impairment
- Cerebral Haemorrhages
- Small vessel disease
- Microinfarcts
- WMLs
- Atrophy
- ε4 allele carriers
Typical case of 92 year old woman:
Main neuropathological findings

- Confusion, bilateral weakness, TIAs
- CT- infarction in the rt posterior parieto-occipital region
- Few macro- cortical infarcts
- Lobar haemorrhage
- Numerous microinfarcts
- Severe CAA
- Other findings:
  - Sparse diffuse senile plaques.
  - Braak stage II for NFT
  - Moderate density of AGD grains in limbic cortex.
  - No α-synuclein pathology
CNS patterns of Transthyretin-related amyloidsis in Familial Amyloid polyneuropathy

- Onset 35±9 yrs, disease duration 8 ±4 yrs
- CNS TTR noted 3 yrs onset of peripheral neuropathy
- Pattern: meninges and its vessels and progresses to the meningo-cortical arteries and subpial parenchyma
- Subpial TTR amyloid associated with astrocytosis
- No cortical microbleeds, superficial siderosis or Aβ IR

Radiological signature of CAA

A, lobar microbleeds on GRE images; B posterior dominant WMH; C, dilated PVS on WM T1-WI; D, multiple areas of superficial siderosis