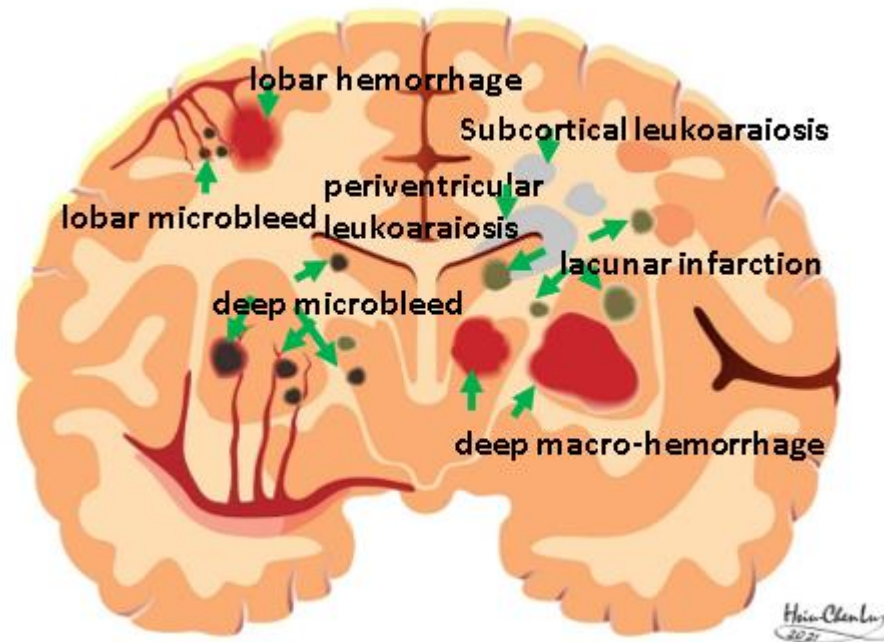
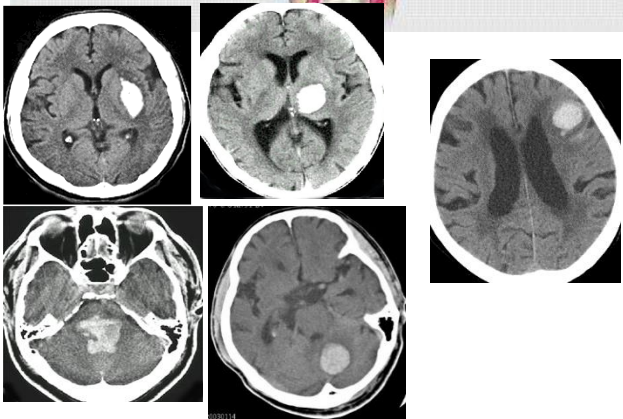
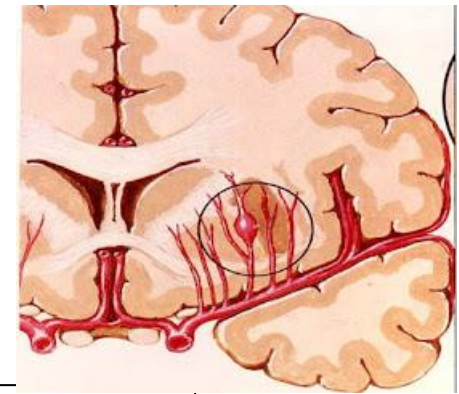


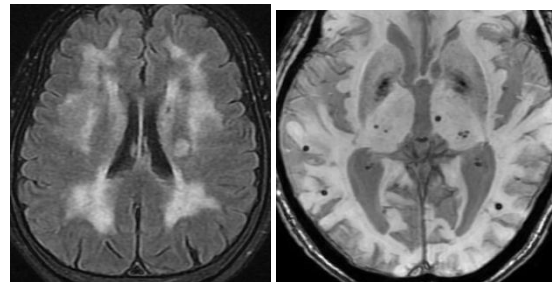
Chronic hypertension, aging, gene:

Deep perforating arteries: hyaline arteriolosclerosis more vulnerable to rupture, or development of minute aneurysms, termed **Charcot-Bouchard microaneurysms**, which may be the site of rupture.

Superficial perforating arteries (medullary artery) -----amyloid angiopathy



(慢性高血壓引起small vessel degenerative change (small vessel disease, svd)
除了會引起ICH，也會：
Lacunar infarction
Microbleed
White matter changes (leukoariosis), *subcortical / periventricular*
Virchow-Robin space widening
----- **imaging markers of svd**



ICH symptomatic

¼ lacunar infarction, symptomatic

¾ lacunar infarction, asymptomatic

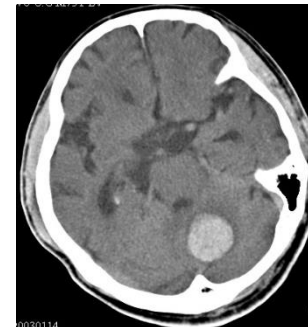
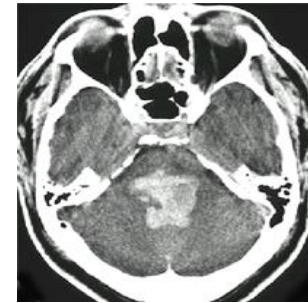
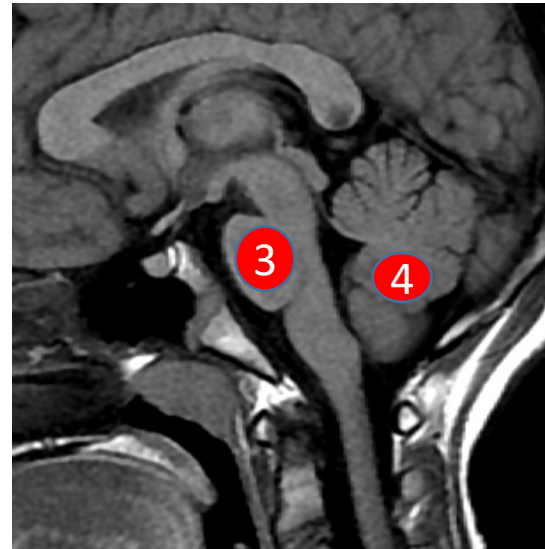
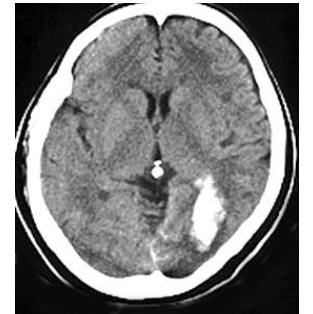
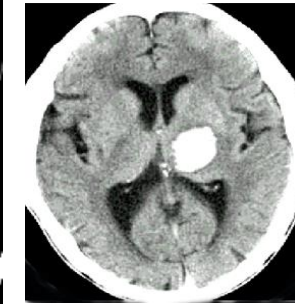
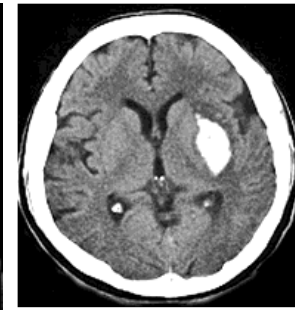
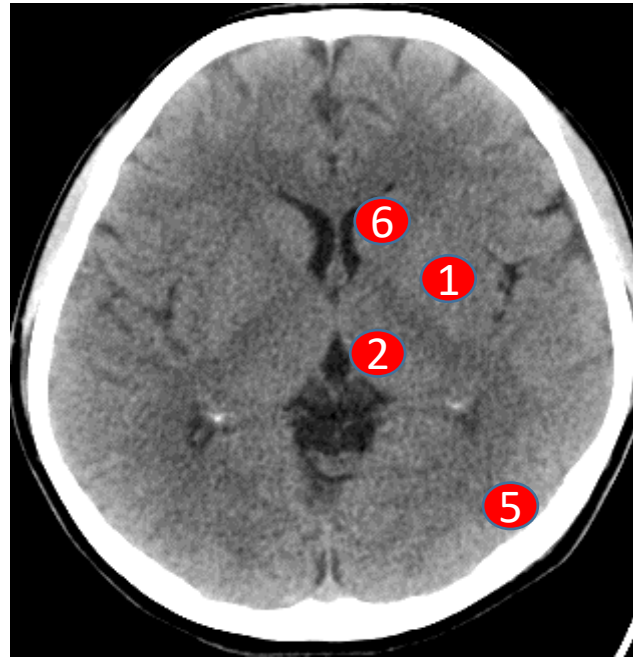
Leukoariosis, microbleed, Virchow-Robin spaces widening are asymptomatic.

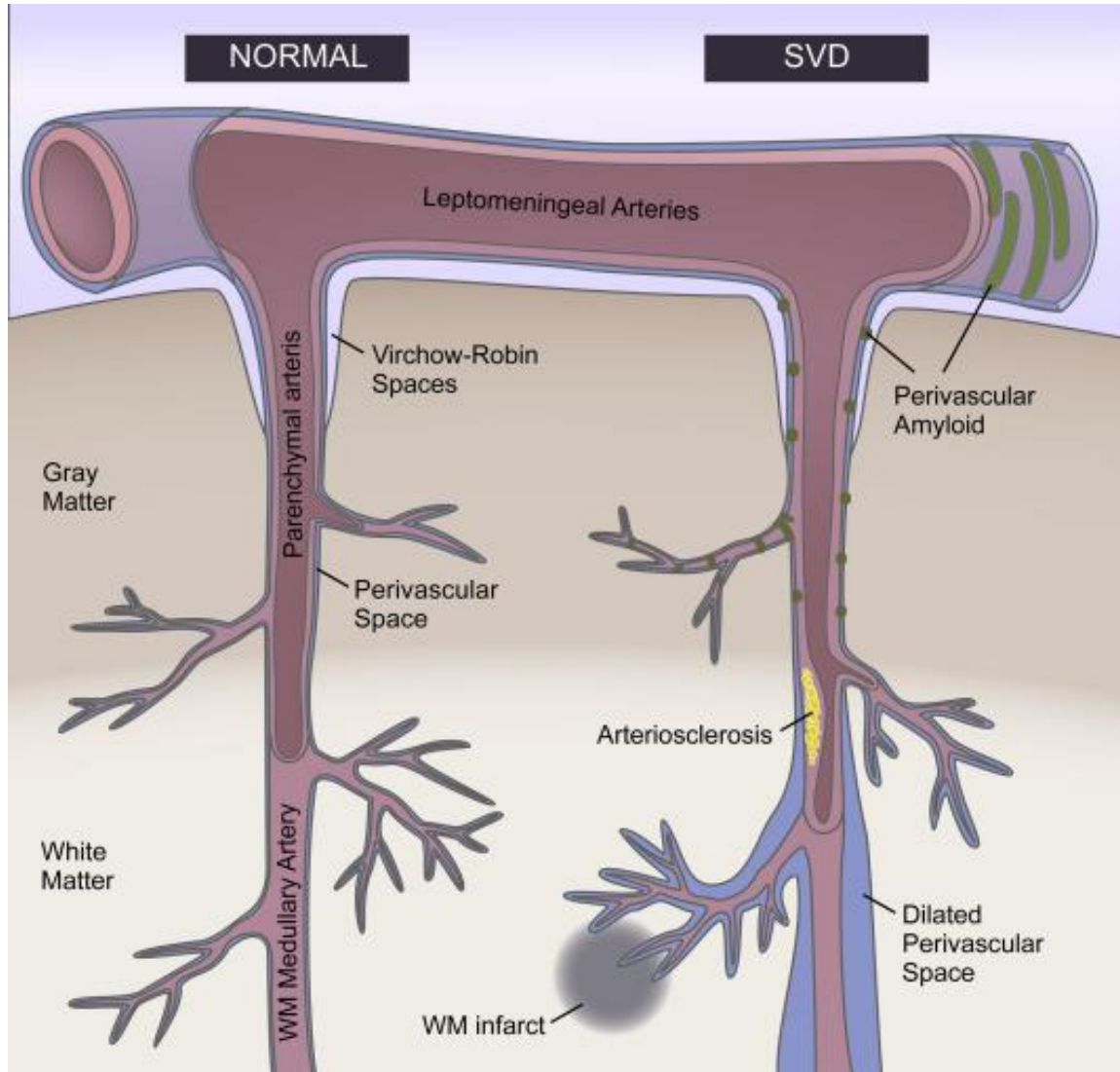
1. Hypertensive ICH

Location of hypertensive ICH

- Basal ganglion:
 - putamen
 - caudate nucleus
- Thalamus
- Brainstem
- Subcortical white matter of cerebrum and cerebellum

發生率順序：1. putamen→2. thalamus→
3. brainstem(pons) → 4. cerebellum →5. subcortex of cerebrum →6. caudate nucleus → brainstem(midbrain) → brainstem(medulla oblongata)

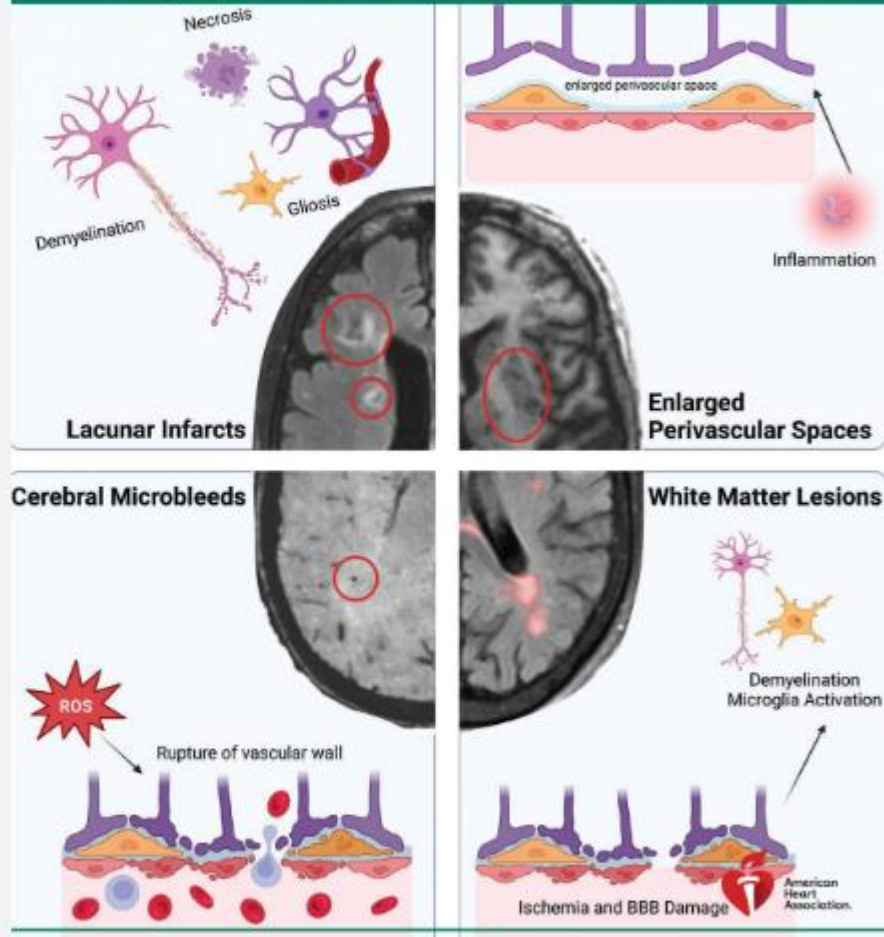




<https://www.sciencedirect.com/topics/pharmacology-toxicology-and-pharmaceutical-science/arteriolosclerosis>



Hypertension



<https://www.ahajournals.org/doi/10.1161/HYPERTENSIONAHA.123.19943>

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