



# Radiología



## 0 - Hemorragia intracerebral no traumática

*M. Castillo*

*School of Medicine University of North Carolina at Chapel Hill, Estados Unidos.*

### Resumen

**Objetivos docentes:** 1. Review general aspects of adult ICH (pediatric ICH is not reviewed). 2. Review new information regarding genetics and imaging markers of ICH. 3. Concentrate on ICH due to hypertension and amyloidosis. 4. Discuss the treatment and prognosis of ICH.

**Discusión:** Intracerebral hemorrhage (ICH) is more common in males, blacks and Asians and alcoholics accounting for 52,000 hospital admissions per year in the USA. Despite advances in ICU care, mortality is stable and is about 30% and the use of acute decompressive hemicraniectomy in this setting shows only minimal benefits. 50% of all patients with ICH die in day one and 60% during the first month. 80% of ICH survivors have significant disabilities. In adults, excluding trauma, the most common cause of ICH is hypertension followed by amyloid in the elderly. Genetic causes are found in 40% of hypertension-related bleeds, 70% of amyloid-related bleeds, and in up to 50% of bleeds due to cavernomas. In presence of AVMS, only patients with HHT harbor a genetic component. MRI risk markers for ICH include mainly microbleeds (identified on SWI) which are seen in up to 80% of ICH patients. Microbleeds due to hypertension occur predominantly in the regions of the central brain (basal ganglia and thalami) and central cerebellum (dentate nuclei). ICH is a dynamic process characterized by acute expansion (40%) and edema. ICH leads to BBB disruption, local coagulopathies, inflammation, and ischemia (hemorrhagic penumbra). Both CT and MRI are 100% sensitive in the detection of ICH. Both modalities can identify the “spot” and “swirl” signs which portray a poor prognosis and signify active bleeding and/or underlying lesions. Cerebral amyloid angiopathy (CAA) is characterized by posterior and cortical microbleeds, SAH (central type), siderosis, and large ICH. Damage to the wall of the subarachnoid and cortical arteries is responsible for its clinical manifestations.