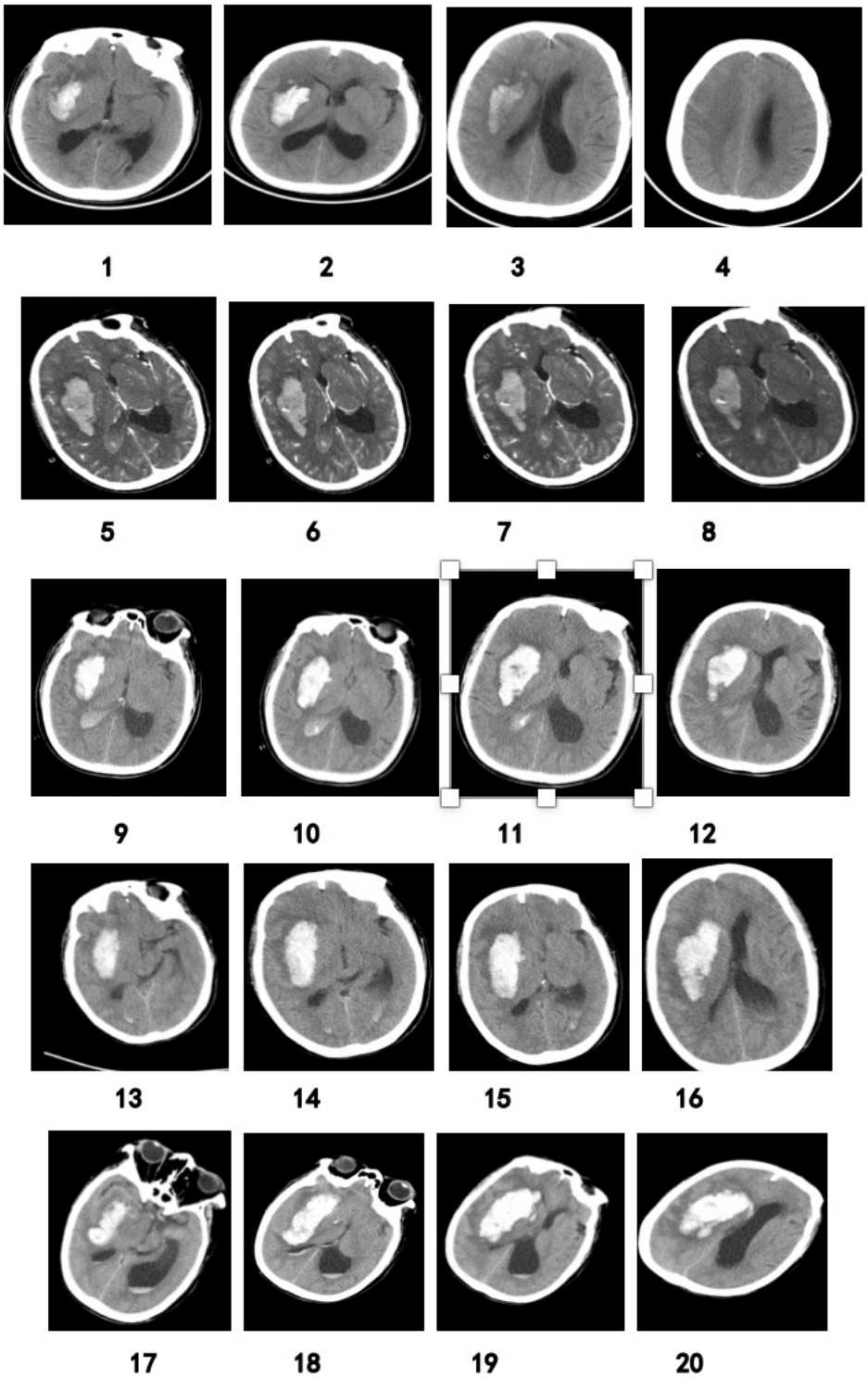
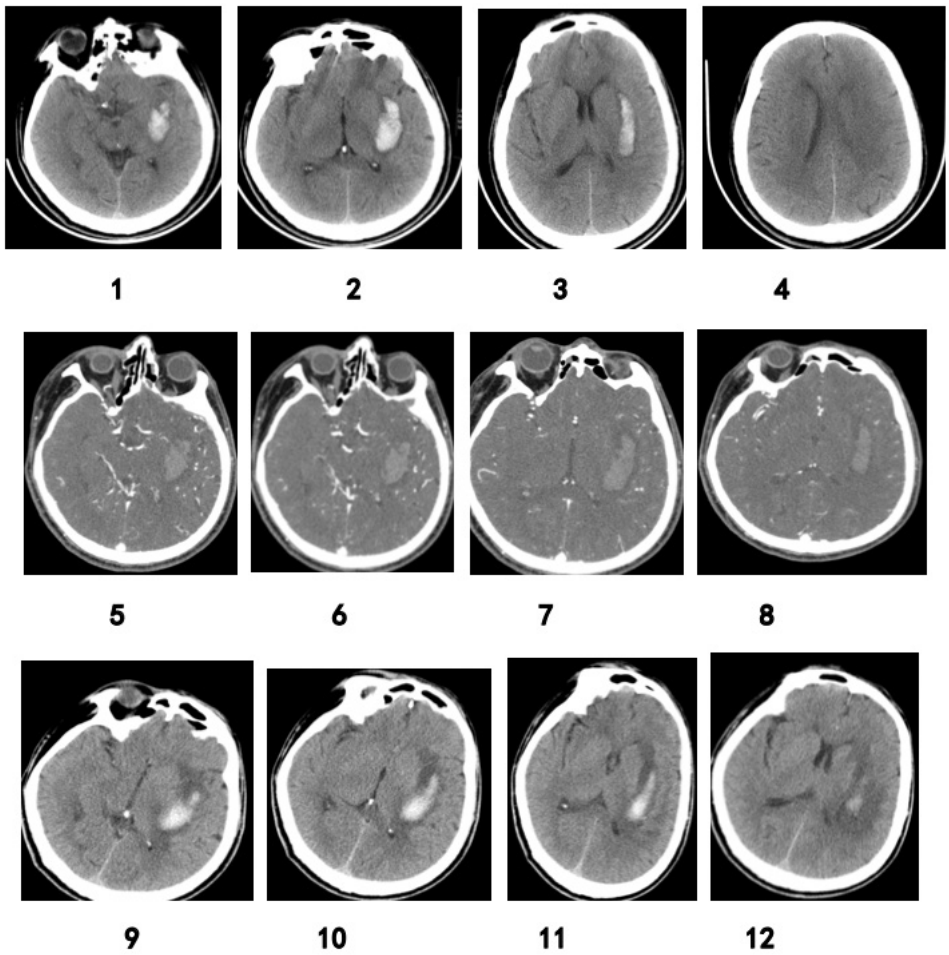
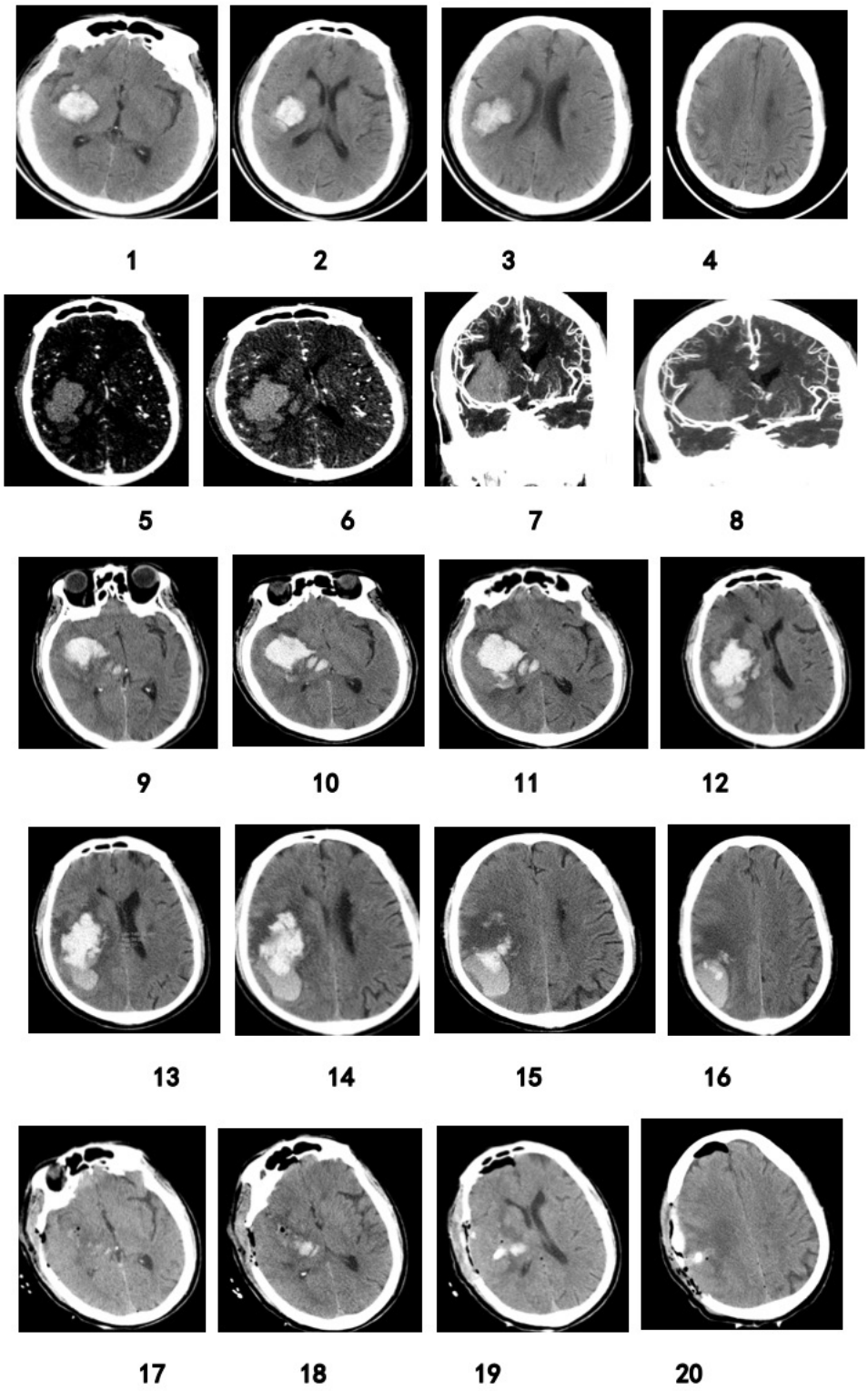


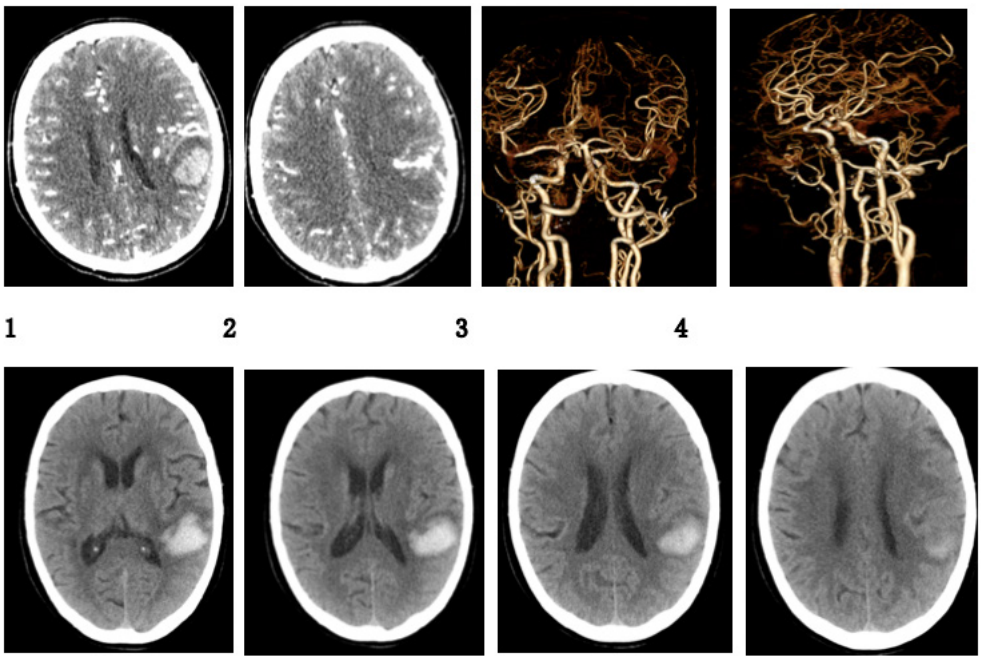
Supplementary Figure S1. The patient was a woman with a history of 8 years of hypertension. She was admitted to the hospital due to sudden left limb paralysis for 2 h. The NIHSS score was 16 points. 1–4 – The first CT scan showed high-density hemorrhagic shadow (size 3.0 × 7.30 × 3.0 cm^3) in the right basal ganglia. The periphery of the hematoma was irregular and the island sign can be seen around the hematoma. The right lateral ventricle was slightly displaced by compression. 5–8 – The original CTA images reveal a spot sign in the hematoma. 9–12 – CT re-examination after 12 h showed that the hematoma had expanded and ruptured into the right ventricle. The hematoma had an uneven density, which can be visualized as a blend sign and black hole sign. 13–20 – Results of the CT re-examination after 12, 24, and 72 h revealed further expansion of the hematoma and rupture into the ventricle, and a new island sign appeared. The ventricle and midline structure were obviously compressed to the left, and the ventricle was enlarged and exhibited hydrocephalus. Seven days later, the patient died due to pulmonary infection and respiratory and circulatory failure



Supplementary Figure S2. The patient was a man with a history of 12 years of hypertension. He was admitted due to weakness of the right limb for 1 h and had an NIHSS score of 10 points. 1–4 – The first CT scan shows a high-density hemorrhagic shadow (2.1 × 5.0 × 3.0 cm^3) in the left basal ganglia. The periphery of the hematoma was regular. There was no island sign around the hematoma, and no obvious compression or displacement of the lateral ventricle and midline was visible. 5–8 – The original CTA images showed no spot sign in the hematoma. 9–12 – CT re-examination after 72 h showed changes in hematoma absorption. The density was uniform, there was no blend sign or black hole sign. The 72-h NIHSS score was 6 points, and the 90-d mRS score and BI score were 1 and 90 points, respectively



Supplementary Figure S3. The patient was a woman who was admitted due to sudden dizziness and left limb paralysis for 3 hours. Her mental state was blurred, and the GCS and NIHSS were 13 and 18 points respectively. 1–4 – The first CT scan showed high-density hemorrhagic shadow in the right basal ganglia, the size was 2.5 × 4.0 × 4.0 cm^3, the periphery of the hematoma was irregular, an atypical island sign was seen around the hematoma, and the right lateral ventricle was slightly compressed. 5–8 – Original CTA images show the presence of a spot sign in the hematoma. CTA images were intra-hematoma via vascular images. 9–16 – Re-examination of CT after 12 h showed that the hematoma had expanded and ruptured into the right ventricle; it had an uneven internal density, and a new blend sign and island sign appeared. 17–20 – Re-examination of CT 24 h after surgery showed that the effect was good. The 90-day mRS score and BI score were 2 and 85 points, respectively



Supplementary Figure S4. The patient was a woman who was admitted to the hospital due to sudden headache, aphasia, and mild weakness of the right limb for 4 hours. The GCS score was 11 points (E4V1M6), and the NIHSS was 14 points. 1–4 – Original CTA images show thick and twisted blood vessels around the intracerebral hematoma in the left parietal lobe. The reconstructed CTA images show an arteriovenous malformation in the left parietal lobe. CT re-examination after 7 days showed that the hematoma was absorbed. The 90-day mRS and BI scores were 0 and 95 points, respectively