Simultaneous left-sided hypertensive putaminal and thalamic haemorrhages

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DESCRIPTION

A woman aged 71 years with hypertension developed sudden severe headache and right-sided weakness. The blood pressure was 210/135 mm Hg. She was drowsy. Examination revealed right-sided upper motor neuron facial weakness, hemiparesis, hemi-anaesthesia and extensor planter reflex. Urgent non-contrast CT brain scan was done as shown in figures 1 and 2.

Intracerebral haemorrhage comprises 10–15% of all strokes. Approximately 0.7–5.6% of those patients developed simultaneous two (or more) haemorrhages. These bleeds had occurred in different regions of the brain. Hypertension was the commonest aetiology; rupture of Charcot–Bouchard microaneurysm was the initial event responsible for these haemorrhages. The commonest combination of simultaneous haemorrhages was putaminal–cerebellar; in some series, the commonest combination was the bi-thalamic one. The ipsilateral occurrence of putaminal–thalamic haemorrhages is rare; in our previously published case, the patient developed left-sided putaminal–thalamic haemorrhage.[1] In addition, there is no evidence in the literature to suggest any side predilection for hypertensive bleeds. There were no characteristic initial symptoms or neurological signs that might suggest which haemorrhage had occurred first. The treatment of these multiple haematomas is largely medical and conservative; their surgical evacuation is still controversial. However, surgery may be considered a therapeutic option, depending on the location of the haematoma and its longest axis. The early-term and long-term prognoses are poor; destruction of crossing and non-crossing fibre tracts and bilateral diaschisis might explain this poor outcome.[1–3]

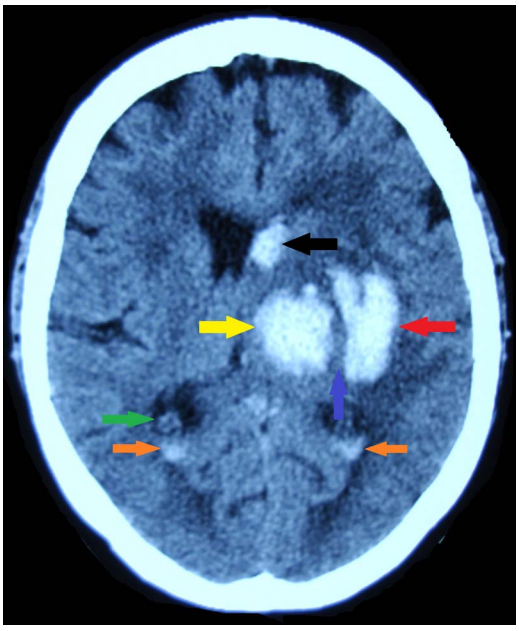

Figure 2 Urgent, non-contrast, axial brain CT scan at the level of basal ganglia and thalami. There are left-sided putaminal (red arrow) and thalamic haemorrhages (yellow arrow). The posterior limb of the left internal capsule (blue arrow) separates the two haemorrhages. The thalamic haemorrhage has dissected medially and has reached the third ventricle; note the appearance of blood within the frontal horn (black arrow) of the left lateral ventricle. The blood can also be seen within the occipital horns (orange arrows) of both lateral ventricles. These bleeds appear as blood/fluid levels below the calcified choroid plexuses (green arrow). Both haematomas act as space-occupying lesions; there are mass effects and mild midline shift.

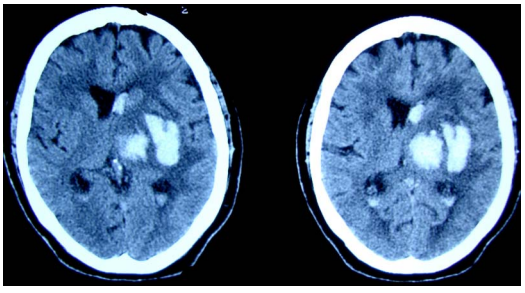

Figure 1 Urgent, non-contrast, axial brain CT scan of the patient. There are two left-sided hyperdense lesions which are indicative of acute intracerebral haemorrhages.

Learning points

- The simultaneous development of two (or more) hypertensive intracerebral haemorrhages is rare; most of these haemorrhages are either cerebellar–putaminal or bi-thalamic.
- There were no characteristic initial symptoms or neurological signs that might suggest which haemorrhage had occurred first.
- The treatment is medical; surgical evacuation is still controversial.

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Patient consent Obtained.

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REFERENCES

1 Amin OS. Simultaneous hypertensive intracerebral haemorrhages: what are the odds? *BMJ Case Rep* 2013;2013:pii: bcr2012008047.
2 Amin OS, Rasheed AH, Ahmed SM. Simultaneous intracerebral haemorrhages; which came first, the supra-tentoral or the infra-tentorial one? *BMJ Case Rep* 2010;2010: pii: bcr0320102805.
3 Shiomi N, Miyagi T, Koga S, *et al*. [Simultaneous multiple hypertensive intracerebral hematoma]. *No Shinkei Geka* 2004;32:237–44.