

Hemorrhagic Stroke in Pregnancy

A Case Report

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A 32 year old female, G1P0, was seen in the Emergency Department at 32 weeks gestation.

The patient had been found at work collapsed, and an ambulance was called.

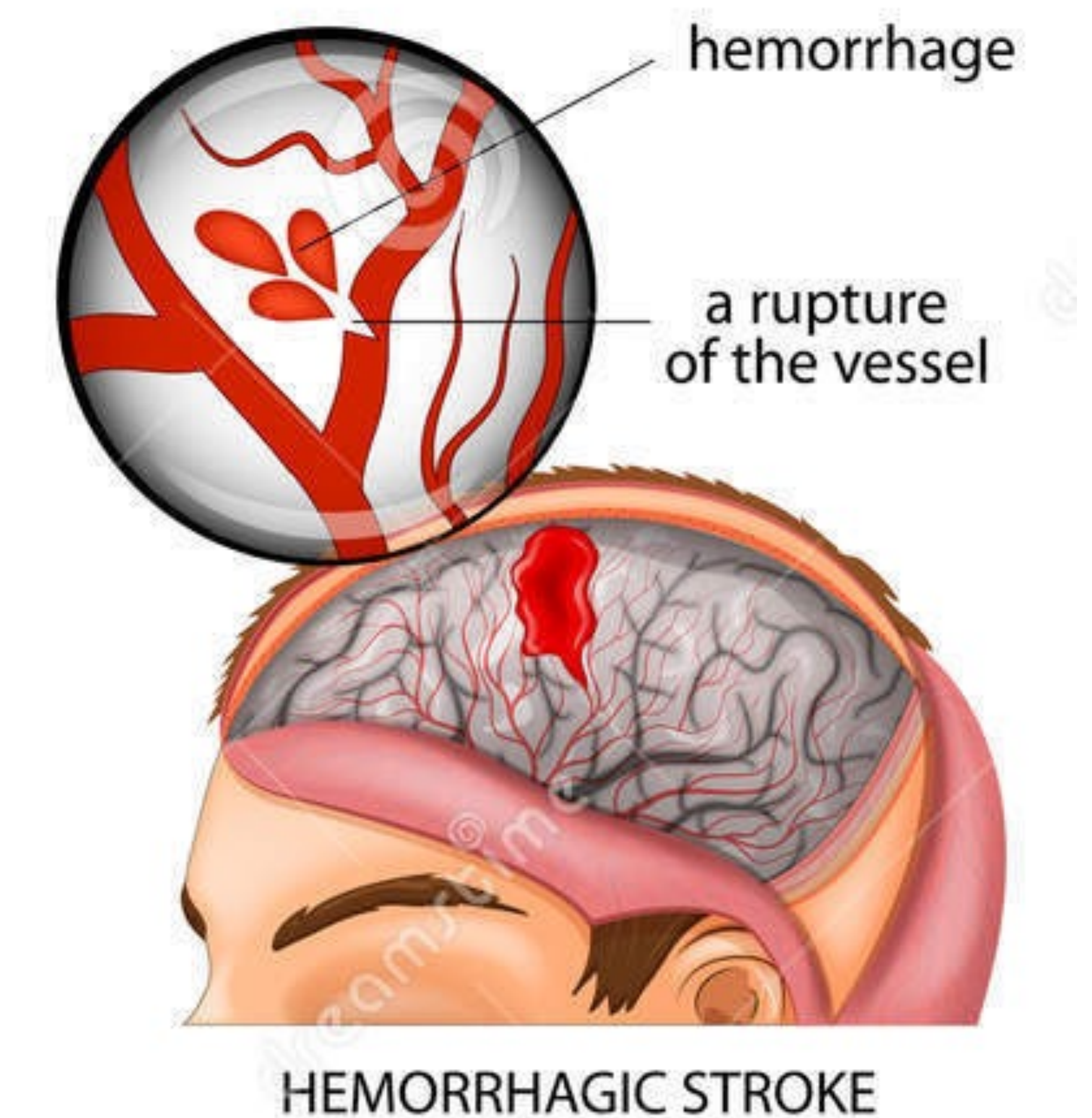
Presenting complaint: sudden onset right sided weakness and dysphagia.

No past medical history of note, uneventful pregnancy up to this point.

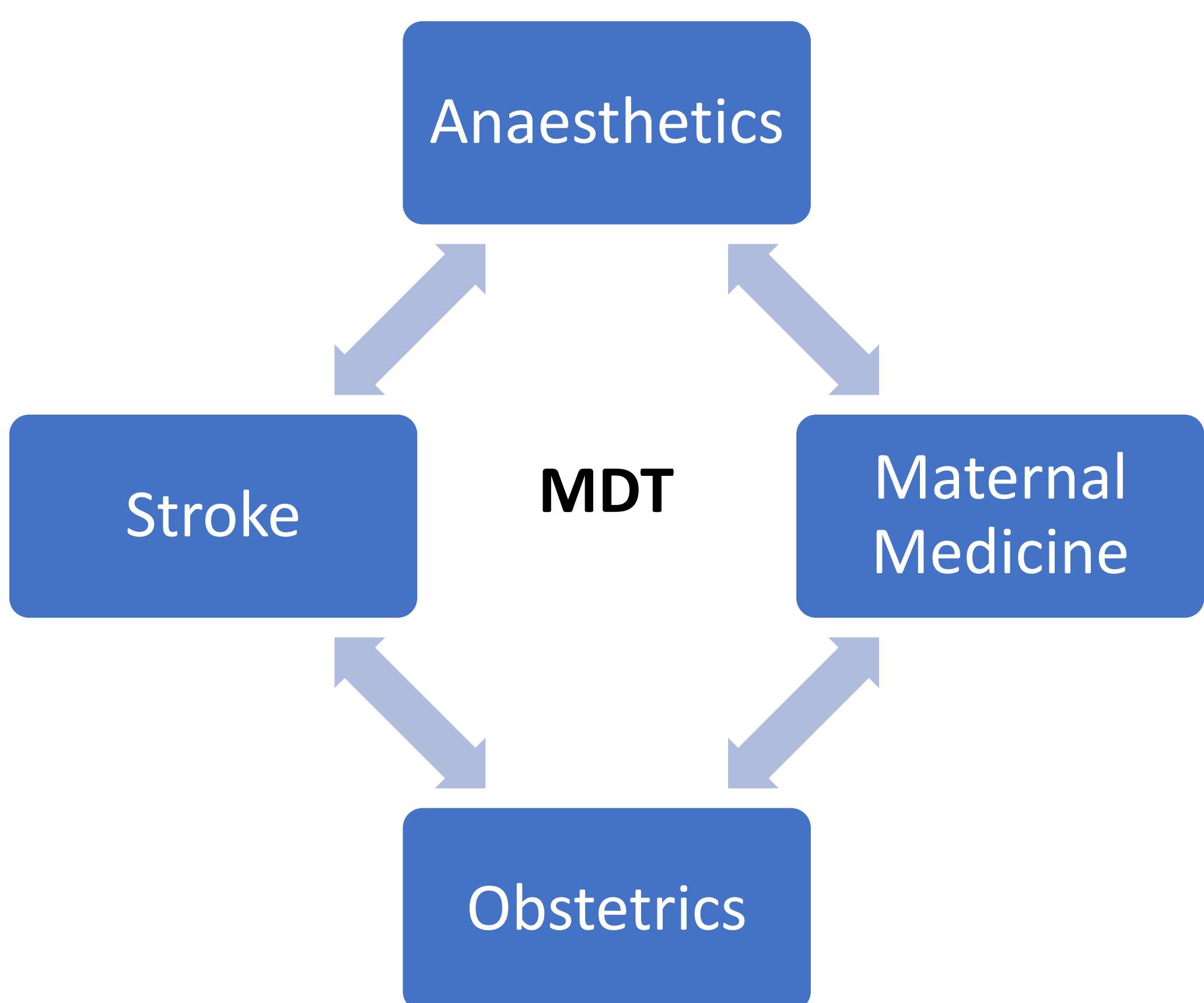
Examination findings: The right upper limb was held in flexion with a MRC power score of 2, and a right lower limb MRC power score of 1. Mild hyperreflexia was also evident. Glasgow Coma Score was E4V2M6[left side]. Comprehension appeared intact, but there was marked dysphasia. Blood pressure was within normal limits and an ECG demonstrated sinus rhythm. CTG was normal.

Imaging findings: Computed tomography and angiography of the head showed a left sided parenchymal bleed. Magnetic resonance imaging confirmed a large intra-axial hemorrhage centred on the left putamen, with no evidence of arteriovenous malformation or aneurysm.

The patient was admitted under Stroke medicine and was treated conservatively, with therapies input.



Following discharge from hospital the patient was discussed by a multi-disciplinary team comprising of consultants in Anaesthesia, Obstetrics, Stroke and Maternal Medicine, and seen in the high-risk anaesthetic clinic to plan delivery.



Obstetric/Anaesthetic plan:
Early epidural insertion and assisted second stage of delivery with the aim to minimise hypertensive episodes during labour.

If for caesarean section then low-molecular weight heparin should be avoided – instead favouring above knee thrombo-embolus deterrent stockings and use of intermittent pneumatic compression boots (‘Flowtrons’) post-procedure.

Delivery was uneventful at 39 weeks, with epidural analgesia on admission to the delivery suite, and Kiwi device assisted delivery as planned.

Subsequent postnatal imaging and Stroke physician review concluded the aetiology to be related possibly to micro-aneurysm.



This case presents a rare presentation of haemorrhagic stroke in pregnancy, particular with no identifiable risk factors. The incidence of stroke (ischemic or hemorrhagic) is estimated to be 25 cases per 100,000 deliveries.[3] Instigation of a multi-disciplinary derived birth plan minimises risk of morbidity to mother and foetus, with the aim of reducing the risk of further bleeding or extension of the intracranial haemorrhage.



[1] <https://www.dreamstime.com/stock-illustration-ischemic-hemorrhagic-stroke-vector-illustration-vessels-brain-brief-description-causes-image99236625>
[2] <https://raisingchildren.net.au/newborns/behaviour/understanding-behaviour/newborn-behaviour>
[3] Gear KE, Bushnell CD. Stroke and pregnancy: clinical presentation, evaluation, treatment, and epidemiology. Clin Obstet Gynecol. 2013;56(2):350-359. doi:10.1097/GRF.0b013e31828f25fa