

**Case Report:** 78 yrs old patient with a background of hypertension and peripheral vascular disease presenting with left sided facial and limb weakness with incidental findings of blood pressure difference in both arms.

**CT Angiogram of Aorta:** Dissection extends into all three branches of aortic arch with occlusion of left renal artery, dissection extends into both iliac common arteries.

**CT Head:** Multiple areas of low attenuation involving right parietal and frontal lobes.

**Conclusion:** The case demonstrates the diagnostic challenges of differentiating stroke from aortic dissection, especially when thrombolytic agents are being considered in a narrow time frame but at a risk of haemorrhagic complications.

The case reveals a patient with a dual diagnosis of an extensive aortic dissection from the left carotids to iliac arteries as well as an acute ischemic stroke.

Cerebral ischemic events are reported to occur in up to 30% cases of aortic dissection whilst neurological symptoms have been reported to occur in up to 40% as a result of vessel occlusion or hypotension. The case highlights the importance of having a high index of suspicion of aortic dissection in those who present with variable neurology and being mindful of a possible accompanying diagnosis of ischemic stroke.

#### ESOC-0556

##### 15. Risk Factors for Stroke/Prognosis

##### The complex relationship between cancer and cerebral vascular accidents

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**Introduction:** Cancer and Stroke both carry a high burden of morbidity and mortality in the United Kingdom. Malignancy can predispose a patient for stroke via mechanisms unique to the disease; in particular hypercoagulable state, venous-to-arterial embolism, non-bacterial thrombotic endocarditis, direct tumour compression of a vessel, tumour embolism, hyperviscosity, angioinvasion leading to arterial embolism, post-radiation vasculopathy and chemotherapy.

**Case report:** A 37-year-old lady who presented with profound expressive dysphasia. Her medical history included a hysterectomy 2 years previously for menorrhagia, with previous endometrial ablation. She was non-smoker and to family history of stroke or venous thromboembolism.

**CT Head** on admission confirmed an acute left middle cerebral artery infarct.

ECG and carotid dopplers were unremarkable.

The patient re-presented on three subsequent occasions over the next 11 months with focal neurological symptoms. At each admission a new infarct was confirmed. She was extensively investigated for thromboembolic causes of stroke including thrombophilia, infection, autoimmune screen, test for Fabry's disease, homocystin level- all negative. 7 day ECG, Trans-oesophageal ECHO, bubble study, CSF study MRV, MRA were negative.

Later that year she developed a right leg deep vein thrombosis. A CT abdomen demonstrated an 8 cm solid mass in the right ovary, subsequent pathology demonstrated ovarian adenocarcinoma.

In our discussion we recognise occult cancer is an important missed diagnosis in cryptogenic stroke. We recommend screening for malignancy for the sub-group of patients where no cause is accounted for. This allows for rapid detection and treatment for both the malignancy and secondary stroke prevention.

#### ESOC-0565

##### 15. Risk Factors for Stroke/Prognosis

##### Infectious complications in critically ill stroke patients

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Infections have significant impact on outcome in critically ill neurological patients. To estimate the structure of nosocomial infections in stroke patients in intensive care setting we analyzed 47 cases of severe stroke (20 males, 27 females, median age 42 years).

**Results:** nosocomial infections were identified in 55.3% patients. The most common nosology was pneumonia followed by urinary tract infections and catheter-associated bloodstream infections, and sinusitis (96.2%, 50.0%, 50.0% and 26.9%, respectively). Combination of at least two infections was found in 65.4% patients. Nosocomial infections were associated with increased duration of ICU stay from median 14 days in patients without infection to 27 days in patients with at least one infection, and to 113 days in 4 infections. Similar results were shown for mechanical ventilation: patients with 0 or 1 complication were ventilated for median 8 or 9 days, respectively, while patients with 2 or more infections required respiratory support for median 50 days. Mortality was similar for no or one or two types of nosocomial infections (14.3% vs. 22.7% and 16.7%, respectively,  $p > 0.05$ ), while all patients with 3 types of infection survived and among patients with 4 infections 50% died. However, infectious complication was never considered as an immediate cause of death.

**Conclusion:** about half of ICU stroke patients are at risk of infectious complications that may double the length of stay and aggravate the need for mechanical ventilation. The most harmful effect has the often seen combination of several types of infections.

#### ESOC-0220

##### 15. Risk Factors for Stroke/Prognosis

##### Carotid plaque lipid content on MRI is associated with plaque instability

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**Background and aim:** The composition of a carotid plaque is thought to be important for plaque vulnerability and stroke risk. The main aim of this study was to assess the level of agreement between MRI assessment of plaque components with cerebrovascular symptoms, carotid plaque ultrasound echogenicity and histological assessments of plaques removed at endarterectomy.

**Methods:** Thirty-four consecutive patients with  $\geq 70\%$  carotid stenosis scheduled for carotid endarterectomy underwent a clinical neurological