Guideline update on the management of subarachnoid haemorrhage

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Abstract

Subarachnoid haemorrhage (SAH) remains a significant cause of morbidity and mortality throughout the world. This oral presentation aims to provide a comprehensive review of the current guidelines and best practice in acute treatment of SAH. Oral nimodipine remains the only prophylactic drug that should be administered to all patients with SAH. After any aneurysm repair, immediate cerebrovascular imaging is generally recommended to identify remnants or recurrence of the aneurysm that may require treatment. The risk of early aneurysm re-bleeding is high and is associated with very poor outcomes. Acute diagnostic workup should include non-contrast head computed tomography, which, if non-diagnostic, should be followed by lumbar puncture. Digital subtraction angiography with 3-dimensional rotational reconstruction is indicated for detection of aneurysm. Before aneurism obliteration, systolic blood pressure should be kept under control (< 160 mm Hg is a reasonable cut-off). In addition to the size and location of the aneurysm and the patient’s age and health status, it might be reasonable to consider morphological and hemodynamic characteristics of the aneurysm when discussing the risk of aneurysm rupture. Transcranial Doppler is reasonable to monitor for the development of arterial vasospasm. Maintenance of euvolema and normal circulating blood volume is recommended to prevent delayed cerebral ischemia (DCI). Induction of hypertension is recommended for patients with DCI unless blood pressure is elevated at baseline or cardiac status precludes it. Cerebral angioplasty and/or selective intra-arterial vasodilator therapy is reasonable in patients with symptomatic cerebral vasospasm, particularly those who are not rapidly responding to hypertensive therapy. Acute symptomatic hydrocephalus should be managed by cerebrospinal fluid diversion or lumbar drainage. Heparin-induced thrombocytopenia and deep venous thrombosis, although infrequent, are not uncommon occurrences. SAH patients should be managed in a fast-track fashion to achieve better outcomes.