Q12336

Patient transferred from other Hospital after an initial diagnosis of aneurysmal subarachnoid hemorrhage (SAH), likely secondary to an aneurysm in the basilar artery territory.

Medical History Previous Surgeries: Radical abdominal hysterectomy Laparoscopic cholecystectomy Chronic Medications: Solifenacin for overactive bladder. Hospital Course Admission to ICU:

Initial Status: Patient admitted in an induced coma (GCS 9). Imaging: Initial CT revealed diffuse SAH, intraventricular hemorrhage, and a probable aneurysm at the left P2-P3 bifurcation.

Procedure: Cerebral angiography confirmed the aneurysm, which was subsequently embolized.

Cerebral Angiography and Embolization Indication: Suspected pseudoaneurysm at the left P2-P3 junction identified on imaging. Procedure: Diagnostic cerebral angiography confirmed the presence of a pseudoaneurysm. Embolization performed using glue (1:1 dilution). Procedure conducted under general anesthesia with intensive care unit (ICU) monitoring. Nimodipine (10 ml) infused through the carrier catheter to facilitate vasodilation and reduce vasospasm risks. Outcome and Monitoring Post-procedure imaging confirmed adequate exclusion of the pseudoaneurysm. Close neurocritical care monitoring implemented to observe for potential complications such as vasospasm, rebleeding, or ischemic events.

Complications and Interventions:

Pseudoaneurysm and Suspected Cerebral Vasculitis:

Follow-up angiography identified a pseudoaneurysm, raising concerns for mycotic aneurysm. Broad-spectrum antibiotic therapy initiated to address suspected infectious etiology. Corticosteroid therapy initiated for suspected autoimmune vasculitis. Associated Infections:

Diagnosed with ventriculitis and ventilator-associated pneumonia (VAP) caused by Klebsiella pneumoniae (multisensitive). Serial CSF cultures turned negative following intensive antibiotic therapy. Post-Hemorrhagic Hydrocephalus:

Placement of an external ventricular drain (EVD). Subsequent removal of the EVD after partial resolution. Neurological Complications:

Reoperations due to established ischemia in the left thalamus and occipital lobe. Persistent refractory epileptic activity despite aggressive anticonvulsant treatment. Microbiological and Immunological Findings:

Cultures: Initial CSF cultures positive for Klebsiella pneumoniae, later sterilized with treatment. Immunology: Detection of specific autoantibodies (Ro52), suggesting a potential autoimmune basis. Echocardiography: No vegetations detected on transesophageal echocardiogram. Progressive Deterioration:

Continued severe neurological deterioration with minimal therapeutic response. Cardiopulmonary arrest (CPA), refractory to advanced resuscitation efforts. Primary Diagnoses Spontaneous subarachnoid hemorrhage. Ventriculitis and post-hemorrhagic hydrocephalus. Dissecting aneurysm

embolized at the left P2-P3 bifurcation. Suspected cerebral vasculitis. Brain abscess. Ventilator-associated pneumonia. Established ischemia in the left thalamus and occipital lobe. Discharge Circumstances

Cause of death: Refractory asystole secondary to multi-system complications. Final Comments This case underscores the complexities of managing spontaneous subarachnoid hemorrhage in the presence of concurrent infectious, autoimmune, and neurological complications. Despite an intensive multidisciplinary approach, progressive deterioration led to an unfavorable outcome.