



A Case of Simultaneous Bleeding Multiple Aneurysm: Case Report

Introduction: The aim of this study is to emphasize the importance of treatment and surgical management in rare cases of simultaneously ruptured multiple aneurysms.

Case Report: A 79-year-old female patient with a diagnosis of hypertension and a history of cardiac bypass due to coronary artery disease is admitted to the emergency department with headache and impaired consciousness. The patient has high blood pressure and cannot be controlled despite medical treatment. The patient's neurologic examination revealed disorientation of time and place, and left facial nerve paralysis. In the brain computed tomography (CT) of the patient, parenchymal hematoma accompanied by subarachnoid hemorrhage (SAH). SAH was detected in two different areas, in the left sylvian fissure and in the left occipital lobe. Digital subtraction angiography (DSA) performed for the etiology of bleeding. Three aneurysms were detected in the left ICA cavernous segment, left middle cerebral artery (MCA) and left posterior cerebral artery (PCA). In the evaluation of the bleeding pattern and aneurysm characteristics, both aneurysms were thought to be ruptured, and the patient was taken to endovascular procedure to embolize both aneurysms in the same session. The saccular aneurysm of the patient in the M2 segment was treated with a coil-stent and the fusiform aneurysm in the P2-3 segment was treated with a flow diverter stent. No residual aneurysm was observed in the control angiograms. The patient was followed up with dual antiaggregant therapy with acetylsalicylic acid (ASA) and clopidogrel in the postoperative period. The patient was discharged on the sixth postoperative day with good recovery.

Conclusion: Up to 20% of patients with aneurysmal SAH have multiple intracranial aneurysms (MIA). A ruptured aneurysm should be treated as early as possible to prevent catastrophic secondary bleeding. Identifying the source of rupture in a patient with SAH is imperative to provide microsurgical clipping or endovascular therapy. The bleeding pattern is usually the most defining feature for the detection of a ruptured aneurysm. However, in cases where the bleeding pattern is not sufficient to identify a ruptured aneurysm, treatment should typically be planned by evaluating the aneurysm characteristics such as size, morphology, and location.

Keywords: Subarachnoid hemorrhage, Multiple aneurysm, Endovascular treatment