GIANT HIGH-FLOW RENAL ARTERIOVENOUS FISTULA TREATED BY PERCUTANEOUS EMBOLIZATION

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ABSTRACT

Renal arteriovenous fistulas are uncommon lesions that can lead to high-output cardiac failure and renal crises. They are most commonly observed in young children or young adults who have undergone trauma or surgical procedures. However, they can also be seen in adults. Their diagnosis is often made in the setting of an acute episode, as they can be associated with hypotension, hypertension, or severe anemia. The management of these lesions is usually surgical, but percutaneous approaches can also be used. In this case report, we describe a giant high-flow renal arteriovenous fistula treated by percutaneous embolization with polyvinyl alcohol (PVA) microspheres.

CASE REPORT

A 54-year-old patient presented with a history of diabetes mellitus and hypertension, which were controlled with medication. She was admitted to the hospital with symptoms of severe anemia, hypotension, and acute renal failure. A computed tomography (CT) scan revealed a large, hypervascular mass in the right kidney, which was confirmed by an arteriogram. The patient was referred for percutaneous intervention.

A femoral arterial access was obtained, and a selective renal arteriogram was performed. The fistula was successfully embolized with PVA microspheres. The patient's symptoms improved gradually over the following weeks, and her anemia resolved. CT scans confirmed the absence of the fistula, and renal function returned to normal. The patient was discharged with a plan for follow-up imaging and medical management.

Keywords: renal arteriovenous fistula, percutaneous embolization, polyvinyl alcohol, PVA microspheres.