IR Snapshot

Embolization of Aortic Pseudoaneurysm Complicated by Abscess Formation: *Salmonella* Mycotic Aneurysm?

A 67-year-old woman with multiple comorbidities presented with few-month of back Computed history pain. tomography (CT) scan [Figure 1] showed intimal defect with saccular pseudoaneurysm at the posterior wall of the abdominal aorta originating between the celiac trunk and superior mesenteric arterial origin. Due to the multiple comorbidities and proximity of the pseudoaneurysm to the major visceral branches' origin [Figures 1 and 2],

Figure 1: Axial and sagittal computed tomography images showing intimal defect with saccular pseudoaneurysm at the posterior wall of the abdominal aorta originating between the celiac trunk and superior mesenteric arterial origin

surgical repair or stent graft and chimney reconstruction were not a good option; therefore, embolization was the only choice. The neck of the pseudoaneurysm was cannulated coaxially, and then a total of 48 variable size, detachable 0.018" coils were used (ranging between 12 and 25 mm). Successful embolization was achieved with complete occlusion of the pseudoaneurysmal sac [Figure 3]. The



Figure 2: Digital subtraction angiogram through pigtail catheter was performed confirming saccular aortic pseudoaneurysm (36 mm × 24 mm, with 11-mm neck) arising posteriorly from the aortic wall between the origin of celiac and superior mesenteric arteries

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Figure 3: Fluoroscopic image showing embolization of the peudoaneurysmal sac with 48 detachable 0.018" coils. Digital subtraction angiogram after embolization shows complete occlusion of the sac

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Figure 4: Computed tomography of the abdomen after 6-week interval showing the development of infected collection within the embolized pseudoaneurysm. Loculated empyema was also noted within the left hemithorax

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patient was discharged 1 week after the embolization. She was admitted again after 3 weeks with low-grade fever and leukocytosis, and then developed septic shock and acute kidney injury. Follow-up CT scan [Figure 4] showed air pockets and collection around the embolized pseudoaneurysm. Blood culture was positive for *Salmonella* species. The patient's condition deteriorated and expired at 6 weeks after intervention.

Salmonella aortitis is a rare but serious condition with a high mortality rate. Antibiotic therapy combined with aggressive surgical debridement of the infected tissue and vascular reconstruction is the gold standard therapy. Endovascular treatment should be reserved for patients who are poor surgical candidates and should be combined with the long term of antibiotic therapy.

Informed consent

The patient consented for the procedure.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initial will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.