

PREPROCEDURE DIAGNOSIS:, Left leg claudication.,POSTPROCEDURE DIAGNOSIS: , Left leg claudication.,OPERATION PERFORMED: , Aortogram with bilateral, segmental lower extremity run off.,ANESTHESIA: , Conscious sedation.,INDICATION FOR PROCEDURE: ,The patient presents with lower extremity claudication. She is a 68-year-old woman, who is very fearful of the aforementioned procedures. Risks and benefits of the procedure were explained to her to include bleeding, infection, arterial trauma requiring surgery, access issues and recurrence. She appears to understand and agrees to proceed.,DESCRIPTION OF PROCEDURE: , The patient was taken to the Angio Suite, placed in a supine position. After adequate conscious sedation, both groins were prepped with Chloraseptic prep. Cloth towels and paper drapes were placed. Local anesthesia was administered in the common femoral artery and using ultrasound guidance, the common femoral artery was accessed. Guidewire was threaded followed by a ,4-French sheath. Through the 4-French sheath a 4-French Omni flush catheter was placed. The guidewire was removed and contrast administered to identify the level of the renal artery. Using power injector an aortogram proceeded.,The catheter was then pulled down to the aortic bifurcation. A timed run-off view of both legs was performed and due to a very abnormal and delayed run-off in the left, I opted to perform an angiogram of the left lower extremity with an isolated approach. The catheter was pulled down to the aortic bifurcation and using a guidewire, I obtained access to the contralateral left external

iliac artery. The Omni flush catheter was advanced to the left distal external iliac artery. The guidewire rather exchanged for an Amplatz stiff wire. This was left in place and the 4-French sheath removed and replaced with a 6-French destination 45-cm sheath. This was advanced into the proximal superficial femoral artery and an angiogram performed. I identified a functionally occluded distal superficial femoral artery and after obtaining views of the run off made plans for angioplasty. The patient was given 5000 units of heparin and this was allowed to circulate. A guidewire was carefully advanced using Roadmapping techniques through the functionally occluded blood vessels. A 4-mm x 4-cm angioplasty balloon was used to dilate the area in question. Final views after dilatation revealed a dissection. A search for a 5-mm stent was performed, but none of this was available. For this reason, I used a 6-mm x 80-mm marked stent and placed this at the distal superficial femoral artery. Post dilatation was performed with a 4-mm angioplasty balloon. Further views of the left lower extremity showed irregular change in the popliteal artery. No significant stenosis could be identified in the left popliteal artery and noninvasive scan. For this reason, I chose not to treat any further areas in the left leg. I then performed closure of the right femoral artery with a 6-French Angio-Seal device. Attention was turned to the left femoral artery and local anesthesia administered. Access was obtained with the ultrasound and the femoral artery identified. Guidewire was threaded followed by a 4-French sheath. This was immediately exchanged for the

6-French destination sheath after the guidewire was used to access the distal external iliac artery. The guidewire was exchanged for the Amplatz stiff wire to place the destination sheath. The destination was placed in the proximal superficial femoral artery and angiogram obtained. Initial views had been obtained from the right femoral sheath before removal. Views of the right superficial femoral artery demonstrated significant stenosis with accelerated velocities in the popliteal and superficial femoral artery. For this reason, I performed the angioplasty of the superficial femoral artery using the 4-mm balloon. A minimal dissection plane measuring less than 1 cm was identified at the proximal area of dilatation. No further significant abnormality was identified. To avoid placing a stent in the small vessel I left it alone and approached the popliteal artery. A 3-mm balloon was chosen to dilate a 50 to 79% popliteal artery stenosis. Reasonable use were obtained and possibly a 4-mm balloon could have been used. However, due to her propensity for dissection I opted not to. I then exchanged the guidewire for an O1 for Thruway guidewire using an exchange length. This was placed into the left posterior tibial artery. A 2-mm balloon was used to dilate the orifice of the posterior tibial artery. I then moved the wire to the perineal artery and dilated the proximal aspect of this vessel. Final images showed improved run-off to the right calf. The destination sheath was pulled back into the left external iliac artery and an Angio-Seal deployed. FINDINGS: , Aortogram demonstrates a dual right renal artery with the inferior renal artery supplying the lower one third of the right

renal parenchyma. No evidence of renal artery stenosis is noted bilaterally. There is a single left renal artery. The infrarenal aorta, both common iliac and the external iliac arteries are normal. On the right, a superficial femoral artery is widely patent and normal proximally. At the distal third of the thigh there is diffuse disease with moderate stenosis noted. Moderate stenosis is also noted in the popliteal artery and single vessel run-off through the posterior tibial artery is noted. The perineal artery is functionally occluded at the midcalf. The dorsal pedal artery filled by collateral at the high ankle level., On the left, the proximal superficial femoral artery is patent. Again, at the distal third of the thigh, there is a functional occlusion of the superficial femoral artery with poor collateralization to the high popliteal artery. This was successfully treated with angioplasty and a stent placement. The popliteal artery is diffusely diseased without focal stenosis. The tibioperoneal trunk is patent and the anterior tibial artery occluded at its orifice., IMPRESSION, 1. Normal bilateral renal arteries with a small accessory right renal artery., 2. Normal infrarenal aorta as well as normal bilateral common and external iliac arteries., 3. The proximal right renal artery is normal with moderately severe stenosis in the superficial femoral popliteal and tibial arteries. Successful angioplasty with reasonable results in the distal superficial femoral, popliteal and proximal posterior tibial artery as described., 4. Normal proximal left superficial femoral artery with functional occlusion of the distal left superficial femoral artery successfully treated with angioplasty and stent

placement. Run-off to the left lower extremity is via a patent perineal and posterior tibial artery.