

IMAGES IN INTERVENTION

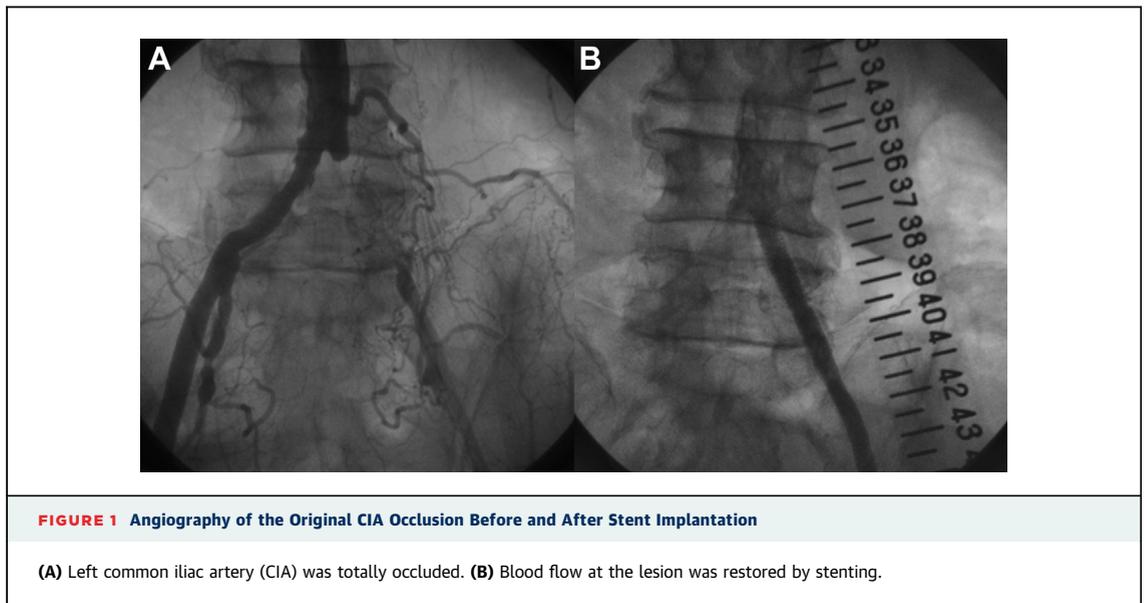
## Occlusion of Balloon-Expandable Stent in the Common Iliac Artery Due to Compression by a Spinal Spur



Hiroshi Fujita, MD, Tomomitsu Tani, MD, Tsuyoshi Ito, MD, Nobuyuki Ohte, MD

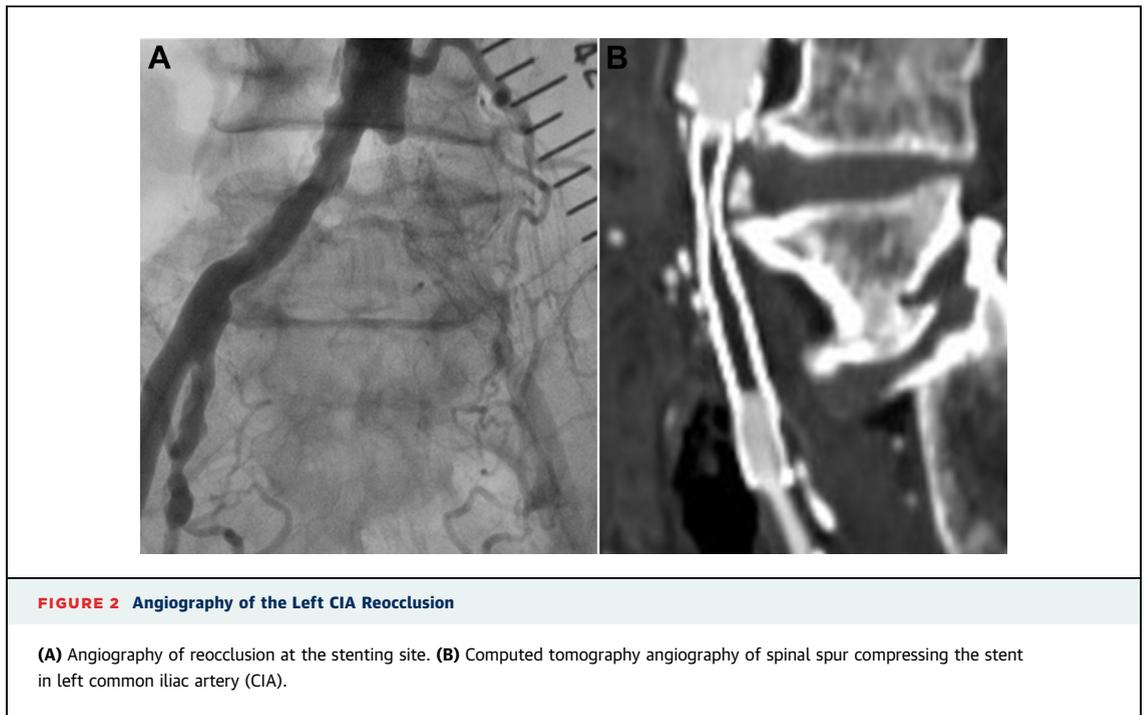
A 67-year-old man with critical limb ischemia due to left common iliac artery (CIA) occlusion underwent endovascular treatment and stent deployment (Express LD, 8.0 × 37 mm and 8.0 × 17 mm, Boston Scientific, Natick, Massachusetts) (Figure 1). The symptoms of ischemia resolved after stent implantation; however, the patient felt pain while at rest in the left leg 3 years later. Angiography indicated a totally occluded left CIA at the stent site. Computed tomography angiography (CTA) revealed that the stent in the left CIA was compressed

by a spinal spur (Figure 2). We speculate that the following occurred. The spinal spur gradually compressed the balloon-expandable stent as the patient performed normal daily activities; eventually, it caused the stent to fracture, causing CIA reocclusion. We performed bypass surgery between the femoral arteries to obtain sufficient blood flow to the left leg, and the patient's pain was relieved. Stent implantation for stenosis of the iliac arteries is an established procedure for limb ischemia. However, stent fracture sometimes leads to stent restenosis and



**FIGURE 1** Angiography of the Original CIA Occlusion Before and After Stent Implantation

(A) Left common iliac artery (CIA) was totally occluded. (B) Blood flow at the lesion was restored by stenting.



reocclusion of the lesion. The fracture rate of self-expandable stents in the iliac region is 5.1% (1). Causes of stent fracture are unknown in most cases.

CTA appears to be a useful means of investigating stent fractures caused by external compression in the iliac region.

#### REFERENCE

1. Higashiura W, Kubota Y, Sakaguchi S, et al. Prevalence, factors, and clinical impact of self-expandable stent fractures following iliac stenting. *J Vasc Surg* 2009;49:645-52.

**KEY WORDS** compression of spinal spur, endovascular treatment, stent fracture, stent occlusion