Emergency chimney stenting for left renal artery occlusion during Nellix endovascular sealing: a case report


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Figure 1 – Case description
77 years old Caucasian man symptomless with a 57 mm abdominal aortic aneurysm (a). Hypertrophic inferior mesenteric artery and lumbar arteries increased type II endoleak risk (b). EVAS with Generation 3 Nellix device was considered as a treatment option (c).

Figure 2 – Procedure Images
Angiogram after saline pre-filling with LRA patency (a) and after polimer filling with subsequent renal obstruction (b). Nellix stents were substantially at the same level. LRA stenting (Advanta V12 6x38mm) with chimney technique and restored LRA patency. (c-d)

Figure 3 – CTA scan at 1 month
Nellix and renal stent patency. Note (arrow) the small bulging of the upper edge of an endobag close to the ostium of the SMA and RRA with irregularities of the vessels and mild stenosis. LRA obstruction might be due to a bulging of one endobag, irregularly shaped after polymer filling.

Take home message
Regardless the reason determining the LRA obstruction, an “emergency Ch-EVAS” could be a feasible and effective intraoperative rescue strategy for an accidental visceral artery obstruction during EVAS

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