

Combined urethral and endovascular treatment of arterioureteral fistulae with fully covered stents

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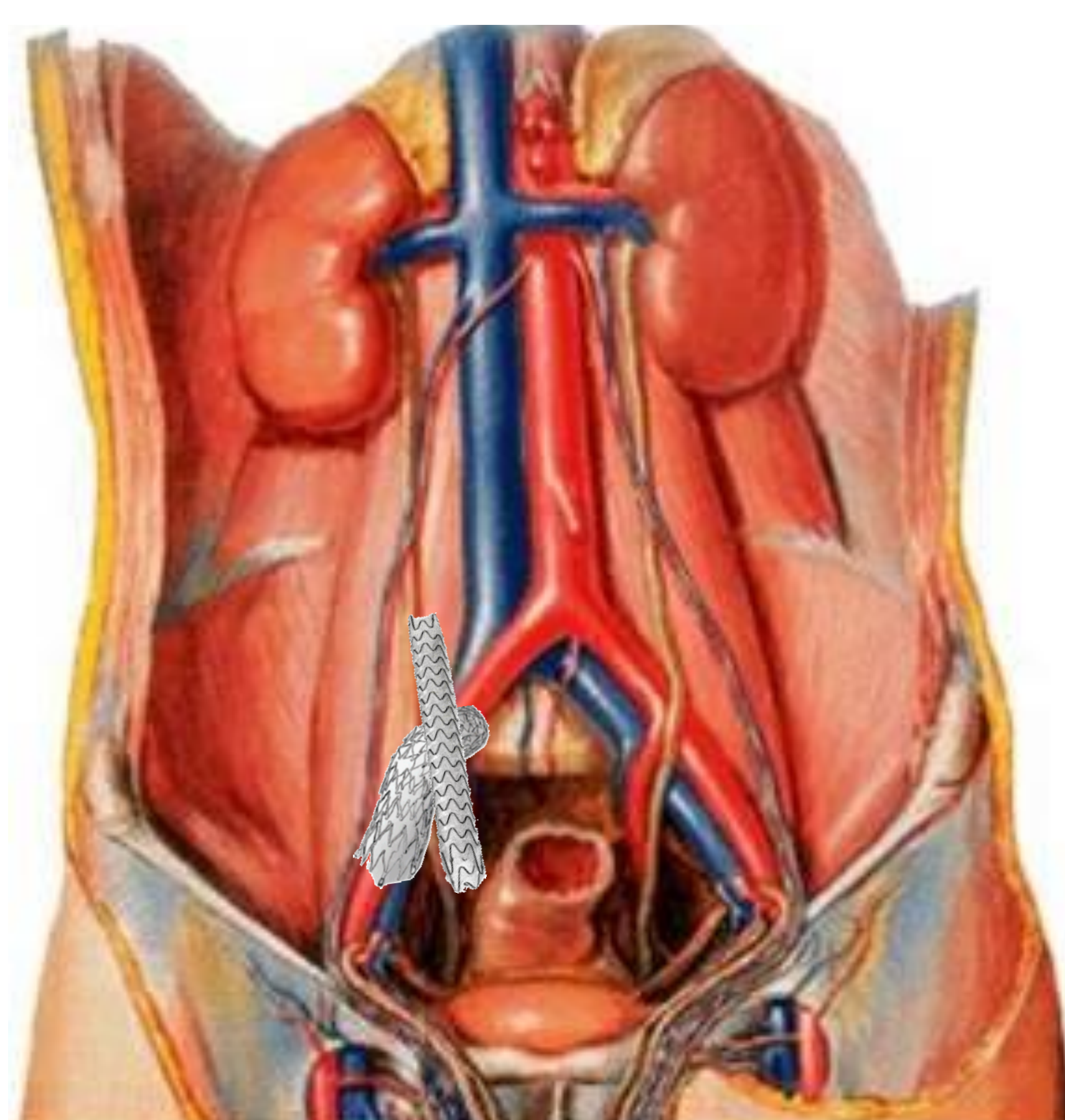
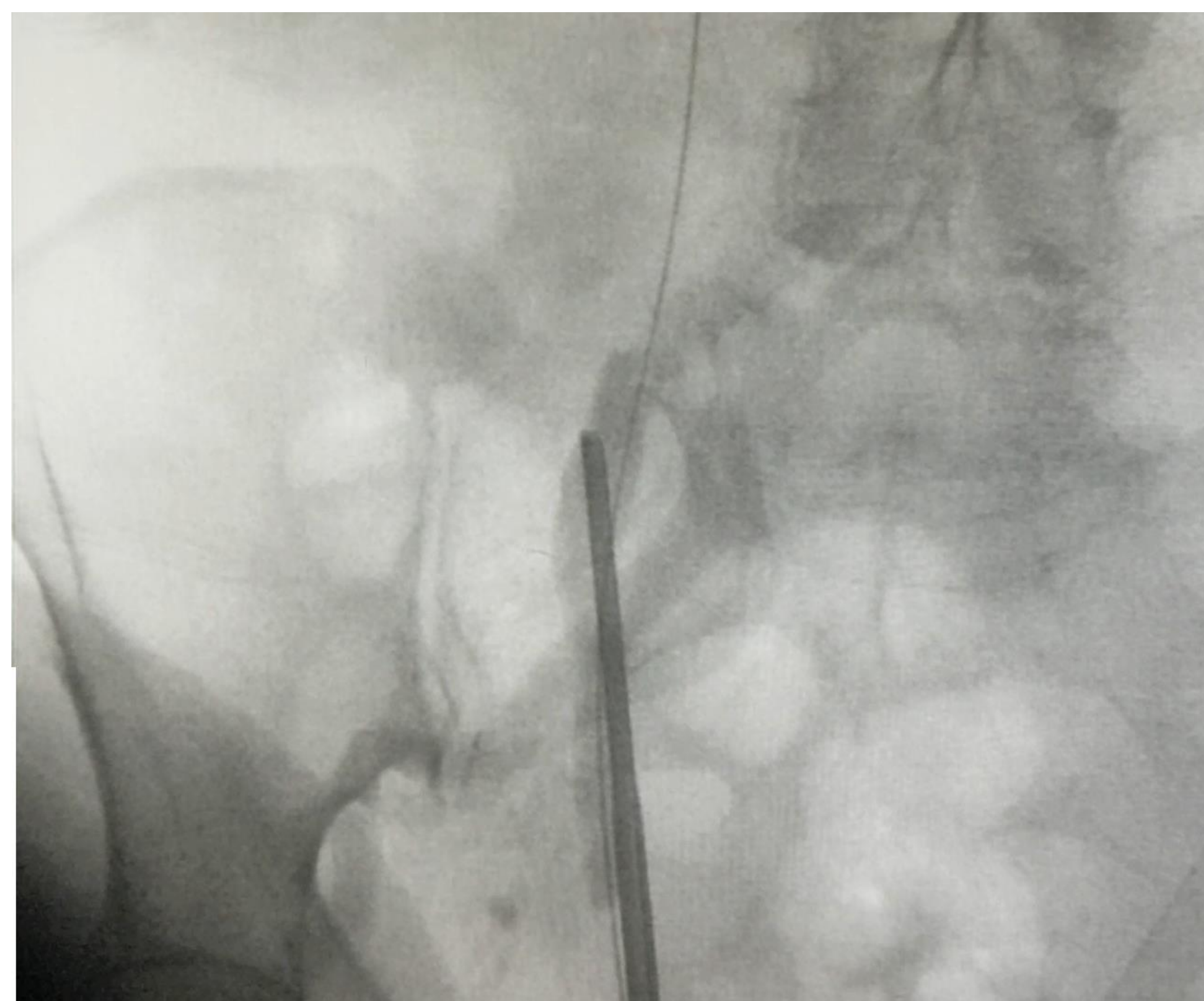
Introduction: Arterio-ureteral fistulae are abnormal connections between an artery and the ureter and carry a high mortality. All patients were treated with a uretral and a endovascular fully covered stent placement.

Objectives: Arterio-ureteral fistulae are abnormal connections between blood vessels and the ureter and most commonly involve the iliac arteries and the ureter. They are rare entities, and only around 200 cases have been reported in the literature. However, the majority of fistulae are secondary, occurring due to radiation or surgery for urological and gynecological cancers, vascular or pelvic surgeries. Our procedure consents include a statement regarding the use of images such as radiographs without patient identifiers for teaching and illustrative purposes. Our institutional policy does not require patient consents for case reports. Case reports are also exempt from institutional board review.

Materials and methods: We present eight cases of arterio-ureteral fistulae that presented with lifethreatening hematuria. Six patients were treated successfully with ureteral covered stent placement (Allium ureteral stent 200x9mm) and three patients are combined treated with uretral (Allium ureteral stent 200x9mm) and endovascular (Endovascular Stent Graft) covered stents placement. Mean surgery time was 55min (16-95min). The position, continuity and sealing of the stent in the ureter and vessel were documented by radiological contrast imaging.

Results: All patients were treated successfully with ureteral or with combined uretral and endovascular covered stent placement.

Conclusions: In conclusion, ureteral or with combined uretral and endovascular covered stent placement of covered stents is a feasible minimal invasive therapeutic option for the treatment of acute life-threatening hemorrhage due to arterio-ureteral fistulae.



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