



## Clinical images

## A patient with endometrial carcinoma associated with horseshoe kidneys and malformation of right external iliac artery



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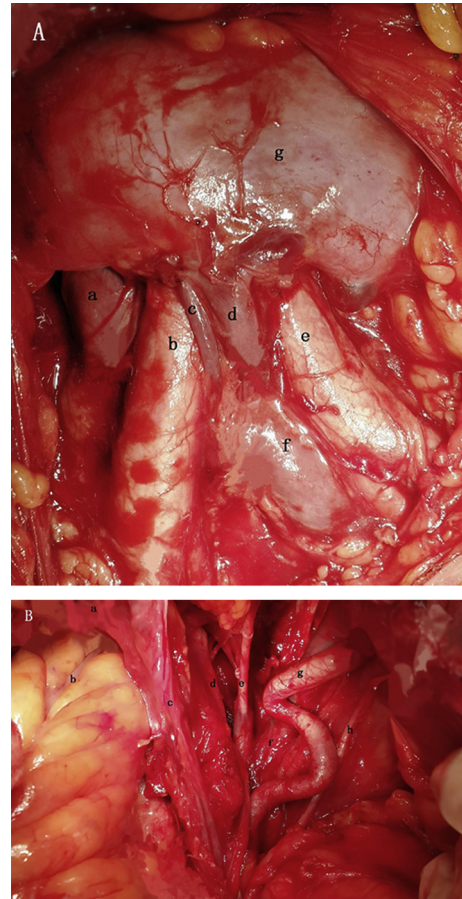
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A 71-year-old woman presented with a small quantity of vaginal bleeding intermittently for 5 months. She had no chronic illness such as hypertension or diabetes. Preoperative pelvic magnetic resonance imaging revealed mass with size of 3.91 cm × 4.11 cm × 4.39 cm in the uterine cavity, which was lobulated with a clear boundary. Hysteroscopy examination showed that the suspicious area of endometrium lesion located the rear and left-lateral wall of uterine cavity and presented the change of abnormal proliferative endometrium like the appearance of placental villi, with the area of 4.0 × 3.0 cm and the special-shaped vessels developing on its surface. The cervical canals wall was smooth. Endometrial biopsy was performed and the pathologic diagnosis was endometrial poorly differentiated adenocarcinoma. After 3 days, semi-radical hysterectomy plus iliac lymph nodes and abdominal aorta lymph node dissection were carried out. As shown in Figure 1A, there was an incidental discovery of horseshoe kidney seen when the retroperitoneum of the aortocaval area was cut with scissors. The inferior poles of bilateral kidneys fused together and rode across the abdominal aorta. Left and right renal veins merged into left common iliac vein. This is a rare event that makes it difficult to perform operations in the area because of possible renal vein injuries. Meanwhile, a snake-like twisting right external iliac artery was seen when iliac lymph nodes were removed (Figure 1B).



**Figure 1.** (A) a = inferior vena cava; b = right common iliac artery; c = right renal vein; d = left renal vein; e = left common iliac artery; f = left common iliac vein; both left and right renal veins infused into left common iliac vein; g = horseshoe kidneys: the fused bilateral kidneys rode across the area of abdominal aorta. (B) a = uterus; b = rectum; c = infundibulopelvic ligament; d = ureter; e = internal iliac artery; f = internal iliac vein; g = external iliac artery; the malformed external iliac was seen with the snake-like twist; h = genitofemoral nerve.

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It was a typical case of malformation of external iliac artery. Lymph node excision including external iliac, internal iliac, laterocaval, interaortocaval, and presacral lymph nodes were all performed successfully. She had a full recovery after 1 week. The diagnosis of postoperative pathology was endometrial adenocarcinoma of Stage

II–III with deep myometrium invasion and without positive lymph nodes. The patient and her family members rejected postoperative chemotherapy in view of her old age. Now she is in follow-up without any complaint of discomfort.