A 46 year old female patient with history of recurrent urinary tract infections and complete bilateral pelvicalyceal system duplication with bilateral vesicoureteral reflux, more pronounced on the right side (Figure 1). She presented a very small bladder capacity related to chronic cystitis. She was also diagnosed of right renal atrophy, presenting a radioisotope renogram with 19% of right renal function.

She went to emergency surgery with symptoms of fever and left colic pain of 24 hours evolution.

On urological ultrasound (Figure 2): a 14 cm-left kidney with prominence of the left pelvicalyceal system and 7mm ureter at the level of the iliac vessels cross were found. Moreover, a 4mm lithiasis was shown at that level, without identifying which ureter of the left duplicity was affected. The abdominal plain X ray film showed no lithiasis.

Urinary diversion with double-pigtail stent in both left kidney excretory systems was performed (Figure 3). Therefore, clinical and laboratory improvement of the patient was
FIGURE 2. Urinary tract ultrasound. Prominence of the left pelvicalyceal system and visible left duplicated ureters. CT scan did not confirm the lithiasis described in ultrasound. Since the patient was in good situation both catheters were retrieved.

In later reviews cystogram demonstrated (Figures 4 and 5) a small-capacity bladder, bladder diverticulum, massive reflux of both left pelvicalyceal systems and massive right lower pelvicalyceal reflux.

Clinical deterioration was observed. Consequently simple cystectomy and Studer ileal neobladder urinary diversion was performed. One year after surgery the patient is asymptomatic, requiring three self-catheterizations per day because of hypercontinent orthotopic neobladder.

FIGURE 3. Abdominal X ray. Two pig-tail stents placed into both left kidney excretory systems.

FIGURE 4 and 5. Cystogram. Small-capacity bladder, bladder diverticulum (arrow), massive reflux of both left pelvicalyceal systems and massive right lower pelvicalyceal system reflux.