Use of endoscopic lithotripsy technique in the treatment of intestinal neobladder lithiasis performed by means of VIP method


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A case of minimally invasive, endoscopic technique of treatment for a large stone formed in the intestinal neobladder was described. The intestinal neobladder was formed in the patient due to invasive urothelial carcinoma, by means of Vescica Ileale Padovana (VIP) method. The use of a pneumatic lithotripter introduced into the intestinal neobladder through the urethra enabled effective fragmentation and safe evacuation of small fragments outside. This endoscopic technique enabled to avoid a technically difficult surgical treatment.

Introduction: In the case of invasive urinary bladder carcinoma in men, a radical cystoprostatectomy with lymphadenectomy is a method of choice. This procedure requires choosing by the operator an adequate method of urinary diversion. Under favourable conditions it is possible to form an intestinal neobladder in the patient. It allows the patient to avoid disability due to urostomy, however, it brings about various early and late complications. Late complications include intestinal neobladder lithiasis, which occurs in 0.5% cases. The formation of stones is caused by infection, excessive mucus secretion and foreign bodies, e.g. staples or sutures. If intestinal neobladder lithiasis occurs, the best method of stone removal should be chosen. If it is possible, we always try to use minimally invasive techniques. Due to anastomosis of the intestinal neobladder with the urethra, it is possible to insert a cystoscope sheath, followed by a lithotripter, into the neobladder and crush the stone. Endoscopic treatment makes it possible to avoid an open surgery.

Case report: The 65 patient was admitted to the Department of Urology on 24.10.2011 due to the presence of a stone in the intestinal neobladder created by means of VIP (Vesica Illeal Padovano) method in May 2006; the stone was diagnosed in USG and confirmed by the plain abdominal X-ray. On 25.10.2011 the patient underwent cystoscopy and intracystic lithotripsy of a large stone, performed in conduction anaesthesia. Crushed fragments were washed out. In the control USG and X-ray no residual stones were detected. The patient was discharged home on the 2nd day after procedure without any complications, without a catheter, and urinating on his own.

Conclusion: Endoscopic lithotripsy of a stone in the intestinal neobladder by means of a pneumatic lithotripter is a safe procedure which makes it possible to avoid an open surgery.