Posterior urethral polyps may cause hematuria, various voiding disorders, outflow obstruction and urinary infections in boys and adults. We report three case of posterior urethral polyps two of them in boys and one of them in an adults. These rare lesions should be considered in the differential diagnosis of hematuria and lower obstructive urinary symptoms in boys and adults.

Key Words: Posterior urethral polyp, obstruction

Posterior urethral polyps are benign polypoid lesions arising from verumontanum or somewhere of prostatic urethra and cause bladder outlet obstruction, hematuria and urinary infection (1-7). The widespread use of high-quality excretory urography, cystourethrography, ultrasound and cystourethroscopy has led to an increased recognition of these rare lesions (3). Posterior urethral polyps should be considered and investigated in boys and young adults presenting with hematuria and nonspesific voiding disturbances. Conventional treatments of posterior urethral polyps are open cystotomy, transurethral resection or fulguration of the polyps and removing of the polyp via laser (8). In view of the rarity of these lesions here in we report our experience with three cases of urethral polyps and outline the diagnostic evaluation and treatment.

Case reports

Between 1992-1999, 3 patients with posterior urethral polyps were seen at our clinic. All of them presented with obstructive voiding complaints and painless gross hematuria. Two of the patients had normal excretory urograms but one of them showed the filling defect in the base of the bladder (Fig. 1) and antegrade urethrogram showed well-defined urethral filling defect and venous leakage in the adult (Fig. 2).

Cystourethroscopy revealed three polyps, 2 of them arising from verumontanum and one of them in the prostatic urethra. Polyps were resected transurethrally. In one boy after transurethral resection the polyp migrated into the bladder but we retrieved it with a broken resectoscope loope (like a fish-hook) avoiding open cystotomy. All of the specimens of histopathologic examination showed fibroepithelial benign polyps.
Case 1
A 4-year-old male child presented with a history of intermittent voiding difficulties and painless gross hematuria for a few months. Excretory urography and ultrasound were normal but cystourethroscopy revealed a 1 cm polyp arising from verumontanum. The polyp resected via transurethrally and histopathologic examination showed a benign polyp of connective tissue covered by transitional epithelium. Subsequently, the complaints of the child have disappeared and the patient has voided well.

Case 2
A 7-year-old male was referred to our clinic because of hesitancy, a decreased stream and terminal hematuria. Excretory urography showed a filling defect at the base of the bladder (Fig. 1). Cystourethroscopy revealed a 2 cm polyp arising from verumontanum. After the transurethral resection of the polyp, it migrated into the bladder. But the specimen removed with a broken resectoscope loop (like a fish-hook) without suprapubic cystotomy. Histopathologic examination showed fibrovascular core and overlying epithelium. The child has done well during follow-up.

Case 3
A 23-year-old male was referred to our clinic because of nocturia, frequency and a poor stream for a few years. Urinalysis showed microscopic hematuria. Excretory urography and ultrasonography were normal but antegrade urethrogram showed a 2 cm filling defect in the membranous urethra and accompanied venous leakage (Fig. 2). Cystourethrography revealed a 2 cm polyp occluded whole the urethral lumen. The polyp was resected transurethrally and histopathologic examination showed a 2 cm polyp has a fibrous core, consisting glanduler tissue covered by pseudodstratified columnar epithelium (Fig. 3). Postoperatively the patient voided with an excellent stream.

Discussion
Posterior urethral polyps are uncommon lesions and up to 1989, 66 cases of urethral polyps are found in the literature (9). Nearly all of them originated from posterior urethra and all reported examples have occurred in boys or men as in our cases. The reported age range of the patients newborn to 79 years and 82 % of all cases occur in younger than twenty years old (9). Our cases are four, seven and twenty-three years old.

Symptoms of bladder outlet obstruction, hematuria or urinary infection are the most common complaints of polyps and the diagnosis is made by excretory urography, voiding cystourethrography, ultrasound and cystourethroscopy. Excretory urography shows the typical filling defect
Urethral polyps were managed successfully by transurethral resection in our cases without suprapubic cystotomy. Histopathologic examination of the specimens showed benign polyps consisting of fibrovascular core covered by transitional epithelium and the adult polyps composed of prostatic type glands as in our cases (Fig. 3).

The prognosis of the posterior urethral polyps are excellent with the complete transurethral resection. No recurrence was seen during follow-up in our cases as in the literature (3).

As a conclusion posterior urethral polyps may cause obstructive urinary symptoms and hematuria in pediatric age group and adults. These rare lesions should be considered in the differential diagnosis of lower urinary tract obstruction, and diagnosis is made by excretory uragrapy, voiding cystourethrography and also antegrade urethrography and cystourethroscopy. Transurethral resection is the best choice of the treatment.

### References