Pelvic lipomatosis – case report

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Abstract

Introduction: Pelvic lipomatosis is a rare disease, with unknown etiology
Material & method: We present a case of a 50 year-old man, with left lumbar pain that started 3 months ago in association with hypogastric pain. Ultrasound showed bilateral grade II ureterohydronephrosis, no other abnormal elements and no postmicturition residue. CT scan reveals increased pelvic adipose tissue that compresses the bladder and rectum
Results: Cystoscopy showed elongated prostatic urethra, normal bladder mucosa and cranial elongated bladder. The pelvic lipomatosis diagnostic was based on the clinical and radiological findings.
Conclusion: Pelvic lipomatosis should be conservatory treated, if renal failure doesn’t occur due to bilateral ureter obstruction. In case bilateral ureterohydronephrosis and renal function deterioration, bilateral nephrostomy or urinary diversion is recommended.

Keywords: pelvic lipomatosis, bladder, ureterohydronephrosis
Introduction
Pelvic lipomatosis is a rare, benign condition, manifested by increased amount of fat in the abdominal cavity, infiltrating perivesical and perirectal spaces predominantly causing extrinsic compression of the bladder, ureters, rectum and blood vessels. It was originally described by Engels in 1959, the etiology and incidence of the disease being unknown [1]. The prevalence is higher in men, especially in the 3rd and 4th decade of life, the male-female ratio is 18:1 [2].

Objective
The aim of this paper is to present a case of a 50 years old man with pelvic lipomatosis diagnosed in our clinic.

Material & method
A 50 year-old man, normal weight, with no past urological surgical antecedents, with left lumbar pain that started 3 months ago in association with hypogastric pain. Clinical examination revealed no abnormal findings. Laboratory constants were normal with creatinine 0.9 mg/dl and urea 39 mg/dl.

Ultrasonography showed bilateral grade II ureterohydronephrosis, no other abnormal elements and no postmicturition residue. The urography confirms bilateral grade II-III ureterohydronephrosis, the bladder is extrinsically compressed and deformed, and the trigonal area is elevated. The bladder assumes a “pear” or “reversed teardrop” shape (Fig. 1-2).

The CT scan reveals increased pelvic adipose tissue that compresses the bladder and rectum and pushes the bladder anterocranial (Fig. 3-4).

Results
Cystoscopy was difficult due to angulation of the bladder neck. It revealed elongated prostatic urethra, normal bladder mucosa and cranial elongated bladder, that made the visualization of the whole bladder very difficult. The ureteral orifices came very close to the bladder neck.

The pelvic lipomatosis diagnostic was based on the clinical and radiological findings. Because renal function was not impaired and symptoms attenuated, the indication is conservatory treatment and long term follow-up.

Discussion
The etiology of this disease is unknown. Some authors have proposed obesity to be the cause, because approximately half of the patients were obese [3]. Also improvement and worsening in symptoms have been correlated with weight loss and gain, respectively [2].

Clinical symptoms appear due to compression on urinary tract, digestive tube or blood vessels. Patients can present low urinary tract symptoms, hematuria, sometimes in association with tenesmus, constipation, diarrhea, painful ejaculations. According to Klein et al. there are two clinical profiles of patients with pelvic lipomatosis. First one is represented by young, short men, with low urinary tract symptoms, cystitis and high blood pressure, that develop, in time, progressive bilateral ureterohydronephrosis [4]. The other profile includes old men that are incidentally diagnosed, with reduced symptomatology.

Physical examination may find abdominal pain during palpation, a hypogastrium mass, a high-riding prostate during digital rectal examination, bilateral leg edema or high blood pressure.

The diagnosis is based on radiological findings in association with clinical data. Urography reveals a “pear”-
shaped bladder, laterally symmetric deviated ureters and bilateral ureterohydronephrosis [5]. Computed to-
mography shows the bladder and rectum surrounded
by homogenous fat tissue (attenuation coefficient -40
to -100 Houndsfield units) [6].

Cystoscopy and lesion biopsy is indicated, because
there is an association with bladder adenocarcinoma.
Cystoscopy reveals modifications in approximately
75% of cases, most frequently cystic or glandular cys-
titis [7].

Conclusion
Pelvic lipomatosis should be conservatory treat-
ed, if renal failure doesn’t occur due to bilateral ureter
obstruction. Antibiotics or steroids treatments, also
radiation therapy, had no positive results [8]. In case
of patients with bilateral ureterohydronephrosis and
renal function deterioration bilateral nephrostomy or
urinary diversion is recommended. The follow-up pro-
tocol implies annual cystoscopy if hematuria or acute
urine retention doesn’t occur.

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