PELVIC LIPOMATOSIS ASSOCIATED WITH INVASIVE CYSTITIS GLANDULARIS

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SUMMARY
Pelvic lipomatosis is a rare entity with unknown etiology. It often is associated with chronic inflammatory changes or malignancies. We report herein a 56-year-old man with pelvic lipomatosis associated with invasive cystitis glandularis causing severe urinary obstruction with bilateral massive hydroureteronephrosis. The diagnostic procedure and the management of the patient are described.

Key Words: Cystitis Glandularis, Pelvic Lipomatosis, Nuclear Magnetic Resonance.

CASE REPORT
A 56 year-old man presented with hematuria, dysuria, frequency, stranguria and lower abdominal pain with radiation to the bilateral lumbar region for 4 months. Physical examination was normal. Urine analysis showed numerous red blood and white blood cells. Urine culture and strain for Mycobacterium tuberculosis were negative. Serum urea, creation and lipid profile were normal. Excretory urography (IVP) revealed bilateral high-grade hydroureronephrosis with an irregular filling defect in bladder base (Fig. 1). Transrectal ultrasonography confirmed a diffuse irregular and infiltrative mass in the bladder base. Computerized tomography (CT) demonstrated the pre-

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sence invasive bladder tumor. Nuclear magnetic resonance (NMR) scan of the pelvis demonstrated invasive bladder tumor with abundant perivesical fatty tissue (Fig. 2). Cystoscopy confirmed significant small bladder capacity and diffuse bullous edema associated with 5x4 cm solid tumor in the bladder base. Multiple biopsies were obtained. Histologic examination of the biopsies revealed a cystitis glandularis with intestinal metaplasia. There was no vesicoureteral reflux (VUR) on voiding cystourethrography (VCUG). Urodynamic evaluation showed hypocompliance and small total bladder capacity (62 cc). We performed bilateral percutaneous nephrostomy for a few weeks. Cystoprostatectomy and ileal conduit urinary diversion were performed. At laparatomy, true pelvis was narrowed by the abundant adipose tissue. Macroscopically, the cystoprostatectomy specimen was covered by excessive fatty tissue. On histologic examination, a 5x4 cm solid tumor was located on the trigone and extended to the perivesical fatty tissue and the prostate was invaded. The tumor demonstrated cystitis glandularis with metaplastic intestinal epithelium (Fig. 3). Convalescence was uneventful.

**DISCUSSION**

Pelvic lipomatosis is a rare condition by diffuse infiltrating fatty tissue in the true pelvis. In 1959, Engles reported a case with pelvic lipomatosis (1). The pathological entity of pelvic lipoma-
tosis still remains somewhat of an enigma as can be
witnessed by the variety of clinical presentations,
radiological findings and various treatments for
the disease. Proliferative cystitis has been obser-
vied in most patients with pelvic lipomatosis. The
reason for the high incidence of proliferative
cystitis in pelvic lipomatosis remains unclear. It is
speculated that the associated chronic inflamma-
tory changes in the bladder may be a result of
lymphatic obstruction created by the pelvic fat
proliferation (2).

Proliferative cystitis may be associated with
adenocarcinoma of the bladder. Particularly, an
adenomatous proliferation of cystitis glandularis
is premalignant. Heyns et al reported a patient
with pelvic lipomatosis in whom adenocarcino-
ma of the bladder developed 6 years after a diag-
nosis of proliferative cystitis (3).

Computerized tomography (CT) has been
used in diagnosis of pelvic lipomatosis. Allen
and De Kock evaluated NMR image of a patient
with pelvic lipomatosis. They suggested that the
diagnosis of pelvic lipomatosis may be supported
by a NMR scan of the pelvis (4). NMR image not
only allows diagnostic confirmation comparable
to that possible with CT but also provides deline-
ation of cephalad displacement of the bladder ba-
se, elongation of the bladder neck and posterior
urethra, and elevation of the prostate gland. The
MR images show characteristic medial and supe-
rior displacement of the seminal vesicles and
show fatty tissue separating the prostate gland
from the rectum.

The present case is one of a few in which the
disease has pelvic lipomatosis associated with in-
vasive (perivesical and prostatic invasion) cystitis
glandularis. Nuclear magnetic resonance ima-
ging is useful diagnostic tool in pelvic lipomato-
sis.
REFERENCES


2. Yalla SV, Ivker M, Burros HM and Doley F: Cystitis glandularis with perivesical lipomatosis, frequent association of two unusual proliferative conditions. Urology, 5; 383, 1975
