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RESEARCH ARTICLE

CASE REPORT PELVIC LIPOMATOSIS

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Abstract

Introduction:-

Pelvic lipomatosis is a rare benigndisease was first described by Engels in 1959 [3) it is characterized by a overgrowth of normal mature fat tissue in the true pelvic space without limitation of the fat tissue growth by a capsule that causes colon and bladder deformities and compression of blood vessels. 1 / 2 / 3

The etiology behind This disease is unknown (5) and is known to be more common in male gender with male – female ratio range between 10:1 and 27:1, and individuals with dark-skinned phenotype, most frequently at the third or fourth decade of life (5/6/7)**.**

Clinical manifestations include signs and symptoms of compression of of the urinary system, the lower intestinal tract and the vascular system (5 ,8) computed tomography (CT) and magnetic resonance imaging usually used in the diagnosis ofpelvic lipomatosis (4)**.**

Here We are presenting a case of 60 years old man with pelvic lipomatosis who was treated conservatively and discuss the relevant literature**.**

Case Report:
A 60-year-old male, who has been referred to our urology clinic for evaluation of lower urinary tract symptoms (LUTS) in form of frequency and dysuria.

His physical examination was unremarkable. Laboratory investigations showed elevated Creatinine level of 145umol/L (reference range 18-88), the rest of his Laboratory investigations were within normal range. Patient was discovered to have bilateral hydroureteronephrosis incidentally on urinary tract ultrasound during his evaluation of LUTS. Urinary tract Computed Tomography (CT) was ordered to complete his work up, which showed (Figure 2) bilateral hydroureteronephrosis with dilated and tortuous ureters with stretched distal ureters and elongated pear-shaped urinary bladder. These findings raised the possibility of various deferential diagnoses, which prompt the need for diagnostic study and bilateral retrograde pyelogram (RGP) study. Diagnostic cystoscopy showed high bladder and elongated bladder highly inserted ureteric orifices. RGP showed bilateral tortuous ureters with dilated collecting systems and no filling defects. Long-standing JJ stents were inserted bilaterally. These findings have raised the

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impression of pelvic lipomatosis with direct compression on the urinary tract. Patient was kept on regular JJ stent exchange and referred to general surgery for definitive management.

Discussion:-

Pelvic lipomatosis is a rare disease, and the etiology behind it is unknown but there are some theories have been proposed to be possibly causes some authorsraise the hypothesis of local manifestation of generalized Obesity (9),

Other have suggested that it could be a response of recurrent urinary system infections, which may lead to fatty tissue deposition as response the inflammatory process. (6) also, endocrine disorders, posterior urethral obstruction, and steroid treatment have been suggested as possible causes.(5 ,8)

The diagnosis is usually made by means of imaging either CTU or MRI which showed a deposition of fatty tissues in the pelvic space and causing compression of pelvic organs resulting in organs deformities. compressed, fixed, superiorly and anteriorly dislocated bladder giving morphological deformity liketear-drop, pear, gourd or banana-shaped .displaced lower third part of the ureter which give the sings of obstructive uropathy uretero-hydronephrosis. long and anteriorly displaced prostatic urethra can be also seen as result of increased fatty tissue. (4/5)

The complications of Pelvic lipomatosis including obstructiverenal failure,hypertension, thrombosis, stones, and bladder adenocarcinoma (5,8,6,7, 10). Most of the cases of reported to be associated with proliferative cystitis, a premalignant lesion, such as cystitis glandularis, cystitis cystica, or cystitis follicularis.

There is a different treatment modality for patient with pelvicLipomatosis.however, there is no standard or preferred modalities over the other.Some modalities such as weight loss, antibiotics, steroids, and radiotherapy hasnot been proven (5,8). conservative management with regular monitoring of renal function is preferred for patients with less aggressive disease and minor symptoms and without renal impairment (5,8) surgical management should consider If patients symptomatic and have severe hydronephrosis and uremia to prevent renal impairments . urinary diversion with double J stent placement, ureteral reimplantation,bilateral nephrostomy, ureterostomy or conduit with or without simple cystectomy have been reported in managing patient with pelvic lipomatosis (5,6, 7, 8,10,11).

Some authors have reported achievement of therapeutic success withlipoaspiration techniques (12).

The alternative to this approach is removal of the pelvic adipose tissue in the management of pelvic lipomatosis. lipoaspiration techniques have been achievement of therapeutic success (12), bladder fat extirpation and bilateral ureteric reimplantation (either laroscopic or robotic) have been reported in many cases and showed a good success rate and lower recurrent rate.. In 2019, Ge L et al., reported a series of 8 patients with PL who underwent laparoscopic bladder fat extirpation and B/L ureteric reimplantation with a median follow-up of 48.5 months and only one patient was reported to have recurrence at 49 months. also, Ge et al. reported in their study a good outcome in investigating long-term efficacy of a novel treatment modalityfor pelvic lipomatosis, a combination of pelvic mass extirpation and ureteral reimplantation (14).

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