

Bilateral Femoral Hydrocele-First Case in the Medical Literature

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Abstract: *Hydrocele of femoral hernia is an extremely rare entity .Out of 11 reported cases of femoral hydrocele, 9 cases were of primary etiology while 2 cases of secondary etiology due to ascites. All reported cases were of unilateral femoral hydrocele only. We report a case of primary bilateral femoral hydrocele which we did not find in any medical literature even on our extensive search using PubMed, Cochrane, Google scholar, EMBASE, Medline and Scopus. This is the first reported case of bilateral femoral hydrocele in literature.*

Keywords: Bilateral Femoral Hydrocele, Primary, First case Report

1. Introduction

The femoral hernia is the second most common groin hernia although it makes only 10% all hernias. The hernia defect most often presents in middle aged to elder women, suggesting loss of tissue strength and elasticity is a primary etiology [2]. As femoral hernia produces a mass or bulge below the inguinal ligament, on occasion some femoral hernia will be present over the inguinal canal and above inguinal ligament. Approximately 50% of men with a femoral hernia will have an associated direct inguinal hernia whereas this relationship occurs in only 2 % of women [3].

Femoral hydrocele is an uncommon condition [4], in which fluid gets accumulated in the sac of femoral hernia. It is usually diagnosed as an irreducible or incarcerated femoral hernia or subcutaneous lipoma which might be transilluminant. The diagnosis of femoral hydrocele is most likely intraoperative because of the rather frequent occurrence of the incarcerated omentum in hernia[4].The femoral hydrocele has never been diagnosed preoperatively in all cases reported in literature so far but always only after surgical exploration. Our case was also diagnosed intraoperatively. Hereby we report a case of bilateral femoral hydrocele.

2. Case Report

A 32 year old female presented with a right groin painless swelling since 3 years, without any associated symptoms. On examination there was a single non tender swelling with normal temperature, approximately 7* 4 cm in size, globular in shape with impulse on coughing, which was reducible in nature. Her left inguinal region was normal. Her all other clinical examinations were normal. Patient had history of lower segment caesarian section with presence of pfannenstiell scar. Her vitals were normal. Clinical diagnosis of right inguinal hernia was made. Her preoperative blood profile, X-ray chest (P-A) and echocardiogram was also normal. On ultrasonography, it showed the presence of bilateral inguinal

hernia with fluid in both hernia sac with no free fluid in peritoneal cavity with normal liver size and echo texture. We decided to explore for bilateral hernioplasty through the pfannenstiell scar for cosmesis avoiding even scars of laparoscopic surgery. On scar excising incision, we found a transparent swelling, 8*6 cm coming from below right inguinal ligament occupying subcutaneous space [figure1.0]. On further dissection it was found to be sac of femoral hernia containing clear fluid. Preperitoneal space was entered by opening fascia transversalis; entry of femoral hernia into widened femoral ring is confirmed. Femoral hernial sac was drained at its fundus, all fluids drained, there was plug of omentum at neck of sac, empty hernial sac was retrieved through femoral ring, sac was transfixed at neck, redundant sac excised and ligated with polyglactin 2-0 suture in the preperitoneal space. A small polypropylene mesh plug was kept inside widened femoral ring to occlude the gap. Preperitoneal hernioplasty was done with polypropylene mesh of size of 15*10 cm which was fixed to cooper's ligament with polypropylene 2-0 suture.

On exposure of left side after extending the incision same finding of femoral hydrocele 6*3 cm in size was found [figure2.0 and 2.1]. After dealing with hydrocele sac in same manner as on right side, PHS [Prolene Hernia System] hernioplasty was done. Closure of pfannenstiell scar excising incision was done. Postoperative recovery was uneventful. Till date patient is completely alright on telephonic follow-up.

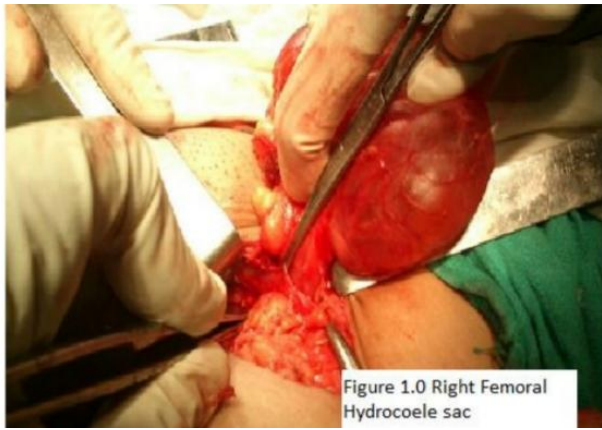


Figure 1.0 Right Femoral Hydrocoele sac

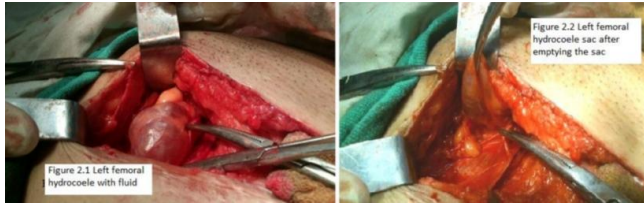


Figure 2.1 Left femoral hydrocoele with fluid

Figure 2.2 Left femoral hydrocoele sac after emptying the sac

3. Discussion

Femoral hydrocele is fluid collection in the peritoneal sac herniating into femoral ring and femoral canal which can be congenital or acquired. The diagnosis of femoral hydrocele is not likely to be made before operation. The first such case was diagnosed by Erdmann as back as late nineteenth century but he failed to report the case. The first such case was reported by Marcy in 1892 intraoperative [4, 8].

The hydrocele of femoral sac poses a dilemma in explanation so as why only fluid is the content of the sac. The femoral hydrocele can be primary or secondary, e.g. peritoneal fluid coming down to hernia sac as in case of ascites [5]. Erdmann proposed the inflammation of the wall of sac to be cause of such a case where as some authors believed that congenital adhesions to be the cause of hydroceles [4].

Degmo postulated that because the neck of the femoral canal is narrow and after wearing of truss, which further reduces the diameter of canal, may take the route of hydrocele as only fluid is allowed in the sac thus advocating trauma as the cause for precipitation of the hydrocele [4]. Bailey in 1927 also observed the similar case secondary to cardiac failure which later become infected and had to be drained [4].

Rives also reported two such cases in 1934 [6]. D.G. Mote et al presented a case of unilateral femoral hydrocele in 2009 [1]. Abdullah et al presented a case of secondary femoral hydrocele due to ascites in 2010 [5]. S Madhivanan et al also reported a case of unilateral femoral hydrocele in 2016 [7]. All the cases reported so far are of unilateral femoral hydrocele only. We are reporting the first case of bilateral femoral hydrocele ever in the medical literature. Our case is also the first case of primary bilateral femoral hydrocele.

4. Conclusion

Recognition of hydrocele of femoral hernia sac at operation requires no particular consideration whether it is unilateral or bilateral, except hydrocele sac should be dealt from below inguinal ligament [4], which we did in our case. A femoral hernia can be repaired using the standard cooper's ligament repair, a preperitoneal approach or a laparoscopic approach; the essential elements of femoral hernia repair remain same.

References

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