

# An Unusual Case Of An Abdominoscrotal Swelling – Hydrocele En Bissac

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## Abstract

Vaginal hydroceles are very common in the northeastern part of India at the residential area of our patient, but abdominoscrotal hydrocele is a relatively rare condition. Most of the abdominoscrotal hydroceles reported in literature are single case reports, because surgeons come across one or two cases in their career. Here we report a case of unilateral huge abdominoscrotal swelling extending up to the umbilical level, with constriction at the middle, causing varicosity of the veins of the left lower limb with atrophy of testis, containing chocolate coloured fluid within.

## CASE REPORT

A 38-year-old male patient, from lower socioeconomic condition and a remote rural area of northeastern India, attended the surgical outpatient department with pain in his longstanding left-sided abdominoscrotal swelling. As far as the patient can remember, the swelling was present from childhood. The swelling had enlarged slowly. But the patient complained of pain in the swelling for the last month, without any significant trauma, associated with enlargement of the swelling. The patient was married for the last 18 years, having three children. He is hard manual worker.

On examination, the general condition of the patient was average, with poor nutrition, normal temperature, mild pallor, pulse 84/min, pitting oedema and varicosity of the long saphenous system of the left leg (Fig.1).

## Figure 1

Figure 1: Varicosity of left leg due to left-sided abdominoscrotal swelling



The swelling – left-sided abdominoscrotal – extended up to umbilical level. There was no definite expansile cough impulse in the swelling. It was an irreducible swelling. The skin at the infero-lateral aspect over the swelling was shiny and edematous. It was 36cm in length, 17cm in maximum width and 12cm in width in its constricted area. The swelling was tense, cystic and constricted at the level of the left inguinal canal. Cross-fluctuation was positive between abdominal and scrotal components, but transillumination was negative. The swelling was dull on percussion. The left testis was impalpable, the right testis was normal. On abdominal examination, the upper portion of the swelling was parietal, otherwise the abdomen was normal (fig. 2).

**Figure 2**

Figure 2: The abdominoscrotal swelling



After routine examination and fitness for anaesthesia, he underwent surgery under spinal anaesthesia. The incision was made over the scrotum extending up to the abdomen over the inguinal canal. Intra-operatively, the swelling was found to be extra-peritoneal, the abdominal portion was dissected bluntly and without any difficulty, the testis was rudimentary, and excision was made in toto. It contained chocolate-coloured fluid (Fig. 3). The sac wall was thick, its inner surface ragged, and there was no growth. The post-operative period was uneventful. Histopathological examination showed no malignancy and no specific infection.

**Figure 3**

Figure 3: The excised specimen



## DISCUSSION

Incidences of vaginal hydrocele are high in the area of

residence of the reported patient due to filarial infection. But abdominoscrotal hydrocele is a very rare occurrence.

The condition was first described in 1834 by Dupuytren and the term Hydrocele en bissac was used.<sup>1</sup>

An abdominoscrotal hydrocele is a collection of fluid in a sac having an abdominal and a scrotal component communicating through the inguinal canal.<sup>3</sup>

There are different explanations for the formation of such a swelling by different authors. One most acceptable opinion is that there is a high infantile hydrocele to start with and as the tension builds up in the proximal portion of the sac, it extends between the layers of the abdominal wall, thus forming the abdominal component of the swelling.<sup>2</sup> Another opinion is that it is due to progressive involvement and distension of the patent processus vaginalis, which is cut off from the general peritoneal cavity.<sup>4</sup>

The majority of the patients are in the 2<sup>nd</sup> and 3<sup>rd</sup> decades.<sup>1</sup> The abdominal portion of the swelling extends upwards extraperitoneally. It causes compression of surrounding structures leading to varicose veins in the lower limb as in this case, atrophy of the testis, upper urinary tract displacement and obstruction.<sup>6</sup> Slow haemorrhage in the tunica vaginalis of a pre-existing abdominoscrotal hydrocele can occur spontaneously<sup>2</sup> and can explain the chocolate-coloured fluid content of the swelling.

The treatment of choice in these cases is generally excision of abdominal part and eversion of the tunica vaginalis through inguinoscrotal incision. But some recommend complete excision,<sup>5</sup> as in this case because the testis is already destroyed and also to avoid morbidity due to the presence of the scrotal component.

## References

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