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Severe scrotal hematoma after hydrocelectomy

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Abstract

Hydrocelectomy is a common and simple urological procedure which may sometimes develop complications. The majority of them are minor, but rarely more significant ones may have an intense clinical image. We present a case of immediate postoperative severe scrotal hematoma after hydrocelectomy that required surgical intervention in a young man.

Keywords: Hydrocele; Hydrocelectomy; Complication; Hematoma.

Case description

A 22-year-old patient submitted for surgical treatment of a moderate symptomatic left chronic hydrocele. The patient had a history of ipsilateral varicocelectomy 4 years ago. The preoperative ultrasound could not locate and examine the left testis mainly because of the hyperechoic image of the hydrocele while the right side was normal. During the surgery the hydrocele sac had an abnormal appearance with significant thickening, extensive calcification areas and the content was impressively dirty and purulent (Figure 1). The left testicle was recognized with an open biopsy and preserved. The operation continued with standard hydrocelectomy and hemostatic continuous suturing of the remaining sac (modified von Bergmann's technique). Drainage and proper dressing were applied. The immediate post-operative image was excellent.

Three hours after the initial surgery the patient developed a severe swelling/hematoma of the scrotum with rapid hematocrit decrease without hemodynamic instability. Due to the severe clinical image (Figure 2) an urgent re-operation was decided while the patient was under blood transfusion. During the second operation, approximately 1 lt of blood clots were evacuated and a minor arterial bleeding from the sac was recognized and ligated with absorbable sutures. The testicle was again preserved. The patient was discharged two days later and the drainage was removed on the fourth postoperative day. Twenty days later, the scrotum had an explicitly improved appearance and after 1 month it was completely healed (Figure 3).

Discussion

Surgical hydrocelectomy is considered a definitive treatment of this benign condition and represents one of the most common urologic surgeries. However, there are significant complication rates despite the simplicity of the operation. These complications are usually mild-to-moderate, yet more severe ones (Clavien-Dindo Grade ≥III) [1] occur in 5% of the cases and they mostly consist of hematomas/hemorrhage, infections and wound dehiscence [2]. Postoperative hematomas may occur due to the high elasticity of the scrotum, in combination with a significant amount of blood loss. Occasionally, they can lead to hemodynamic instability, blood transfusions or surgical intervention. Several sac suturing/plication techniques and more recently the use of vessel-sealing devices have been described for better hemostatic effect [3]. Sclerotherapy has also been proposed as an alternative treatment with reduced complication rates but lower efficacy compared to standard hydrocelectomy [4]. Clinical alertness is essential to prevent and cope with any unexpected complications during hydrocelectomy.

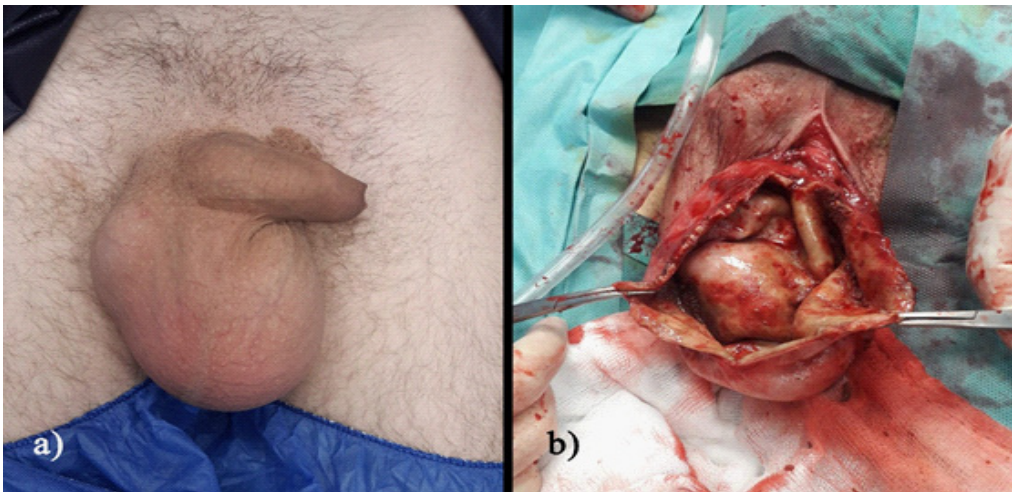

Figure 1: a) Typical left hydrocele. **b)** Intraoperative image of the severely thickened hydrocele sac after content evacuation. The left testis could not be directly identified only by palpation.

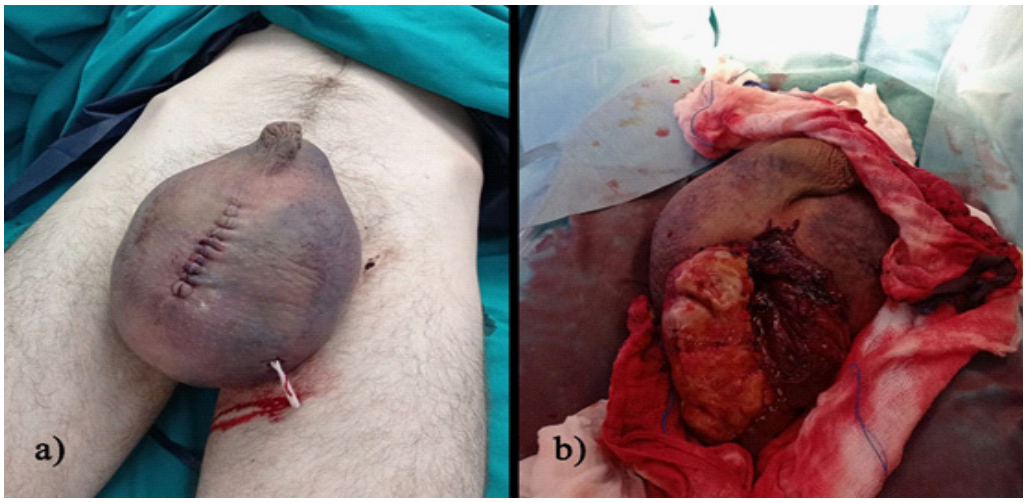

Figure 2: a) Immediate postoperative severe scrotal swelling/hematoma that required surgical revision classified as Clavien-Dindo Grade IIIb complication. **b)** Clot evacuation during the re-operation.

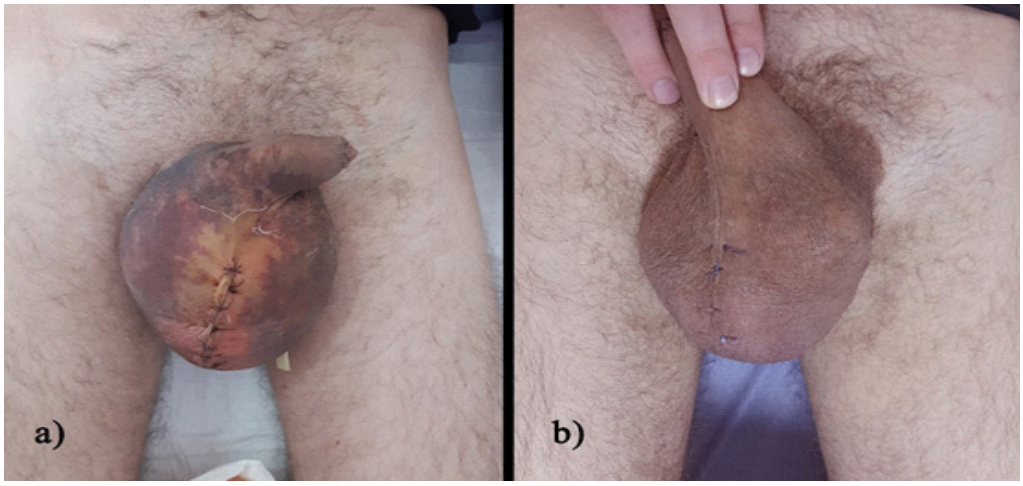

Figure 3: Clinical presentation at the **a)** 4th postoperative day and **b)** 1 month later.

Conflict of interest: All authors declare that they have no conflicts of interest.

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