2017

www.jmscr.igmpublication.org Impact Factor 5.84 Index Copernicus Value: 83.27 ISSN (e)-2347-176x ISSN (p) 2455-0450 crossref DOI: \_https://dx.doi.org/10.18535/jmscr/v5i6.42

Jo IGM Publication

Journal Of Medical Science And Clinical Research An Official Publication Of IGM Publication

# Massive Penoscrotal Haematoma Following Scrotal Abscess Drainage A Case Report and Review of Literature

Authors

Rahul Singh R, Naveed Ahmed Khan, Srinivasan D, Sreeramulu P.N, Lakshmi Reddy Department of General Surgery, SDUMC, Karnataka 563101, India

### Abstract

Hematoma is a common complication of surgical operations. Hematoma of traumatic origin is often associated with severe and extensive injuries. In patients with disorders of blood coagulation, hematoma may occur even after trivial injuries. We report a case of massive penoscrotal hematoma following a simple scrotal abscess drainage. The patient developed secondary hemorrhage post operatively and antibiotic support and blood transfusion was required. Operative evacuation of the hematoma was necessary to avoid the development of necrotizing fasciitis of the scrotum (Fournier's gangrene) and to salvage the testes. After scrotal abscess drainage should the wound be sutured? Is it a must to use drain's in all inguinal and scrotal surgeries? These are few among many questions which need a second thought. We were curious to explore and see why our patient developed a hematoma, and lucky as well to know that the testes were viable and no further complications were to be seen.

Keywords- scrotal abscess, necrotizing fasciitis, Fournier's gangrene, drain.

### Introduction

Abscess is a localized collection of pus lined by granulation tissue and covered by a capsule. One of the common areas where an abscess can develop in men is the Scrotum owing to the fact of the number of sweat and sebaceous glands present. As with any other surgical condition, an abscess drainage is also associated with different possible complications such as infection, bleeding, recurrence, scrotal swelling and nerve damage, Penoscrotal hematoma, one of the complications, is a very well documented complication following scrotal surgeries, however, massive penoscrotal hematoma requiring surgical intervention is rare. Here we report a case of a 50 year old male who presented to us with a simple abscess on the scrotum. Little did he know that he will end up with this complication and undergo two surgeries. Our patient developed a huge penoscrotal hematoma that required surgical drainage of the wound followed by drain placement. From a surgeons perspective no surgery is simple where diathermy is to be used. Complications have to be anticipated. Post operative close observation by the doctor and the nursing staff, meticulous surgical technique can prevent these complications.

### **Case Report**

A 50 year old male, farmer by occupation presented to us with complaints of an abscess on the scrotum since 15 days. He was planned for

# JMSCR Vol||05||Issue||06||Page 23053-23056||June

2017

surgery and to drain the abscess. The procedure uneventful, to our best knowledge was haemostasis was well achieved and the wound was closed primarily without placing a drain. Post operatively patient was shifted to SICU for observation. 4 hours after surgery on our post op rounds patient did not seem to be fine, he was crying with pain, sweating, tachycardia was also present. On examining the operated site, we got the shock of our life. Patient had developed a massive penoscrotal swelling, with the reason being difficult to explain (figure 1). Initially we thought it to be extravasation of urine. Folevs catheter was passed and nearly 800ml of clear urine was drained, even then the edema did not regress. Two sutures were opened and we could see the blood clots popping out (figure 2). Decision was made to explore the site immediately and patient had to undergo spinal anesthesia again and a surgery. Intra op nearly 250-300ml of clotted blood was drained (figure 3) and to our surprise we noticed a thin small bleeder near the summit of the scrotum which we had overlooked in the previous surgery. The bleeder was cauterize and a thorough saline wash was given to make sure there are no more bleeders. Metrogyl wash was given before closing the wound primarily and a corrugated rubber drain was placed this time (figure 4). We were lucky enough to have noticed and explored the complication immediately, we could salvage the testes and prevent necrotizing fasciitis (Fournier's gangrene). The coagulation profile of the patient was repeated and was found to be normal. Immediate post op 1 unit of blood was transfused. And the next day 1 unit of FFP was transfused. The edema gradually reduced over next few days. Patient recovered well, and was discharged after nearly a month. Though the patient had to undergo mental and physical agony, which could have been avoided, he was thankful to us. He has been visiting us regularly for follow up.



Fig 1 : Massive Penoscrotal Swelling



Fig 2: Blood Clots being removed

## Discussion

Abscess on the scrotum is quite common especially in those population who are exposed to sun, sweat regularly as in our patient a Farmer by occupation. As with any other surgical procedure, this is associated with possible complications. These include urinary retention, superficial wound hematoma, superficial wound infection, serous effusion, scrotal edema, persistent neuralgia, hypoesthesia, ischemic orchitis local and hematoma.<sup>1</sup> Most penoscrotal of these complications are of mild to moderate degree and can be treated by a conservative approach. Recent advances in different surgical techniques and equipment claim to have less complications but none are completely devoid of them.<sup>2</sup> Penoscrotal hematoma is one of the most common complications, and usually responds to a conservative approach in the form of rest and scrotal support. In doubtful cases, ultrasound evaluation of the penoscrotal hematoma/ swelling is a useful guide to confirm the diagnosis<sup>3</sup> but in cases of massive hematoma, clinical diagnosis is does not necessarily require obvious and ultrasound. Massive penoscrotal hematoma is not uncommon in patients with bleeding disorders such as hemophilia where trivial trauma can

# JMSCR Vol||05||Issue||06||Page 23053-23056||June

trigger severe bleeding in the scrotum.<sup>4</sup> It has also been reported in patients following transfemoral catheterization<sup>5</sup>, percutaneous cardiac transluminal angioplasty<sup>6</sup> and with rupture of the Dacron aorto-femoral graft.<sup>7</sup> It has also been reported as a complication following urological procedures.<sup>8-9</sup> Our patient who came for a simple procedure landed in something which was totally unexpected. The surgeon was at fault that he overlooked the bleeder. Simple but meticulous techniques like suture ligation of the bleeding vessels and/or use of diathermy can pause the Different techniques have bleeding. been employed in practice such as the hitch-stitch and drain technique to prevent bleeding and avoid postoperative hematoma.<sup>10</sup> What happened with us can happen with anybody hence the purpose of reporting this case is that emphasize on hemostasis in any operative procedure, to avoid the complications which are avoidable with accurate and meticulous surgical techniques. The close observation of the patient postoperatively and decision making when need arises. A debate on drain placement in scrotal and inguinal surgeries and primary closure of the wound after an abscess drainage still prevails. The million dollar question still remains, that had we placed a drain in the first surgery; would we have avoided this complication??



Fig 3: Nearly 300 ml clotted blood was drained



Fig 4 : Sutured wound with Drain being placed

## Conclusion

We conclude saying that no surgery is free of complications. Everything has a reason and the patient should not be the sufferer. As it is told if the cause is *"idiopathic"* the patient is *pathetic* that he has to suffer and the treating doctor is an *idiot* who could not find the cause. We stress upon the point that absolute hemostasis is the need, come what may, in any surgery. The use of drains in scrotal surgeries is useful to prevent scrotal swelling and avoid hematoma formation.

### References

- Beauchamp CM, Ever BM, Mattox KL. Sabiston Textbook of Surgery: The biological basis of Modern Surgical Practice, 19ed. vol-2. Philadelphia: Saunders; 2012. p. 1114.
- Tanovic H, Mesihovic R, Muhovic S: Randomized trial of TEP laparoscopic hernioplasty versus Bassni inguinal hernia repair. *Med Arh* 2005, 59(4):214-216.
- Archer A, Choyke PL, O'Brien W, Maxted WC, Grant EG: Scrotal enlargement following inguinal herniorrhaphy: ultrasound evaluation. Urol Radiol 1988, 9:249-252.
- Ekeke ON, Nwauche CA: An uncommon cause of massive penoscrotal haematoma. *Niger J Med* 2004, 13:64-66.
- Borden TA, Rosen RT, Schwarz GR: Massive scrotal hematoma developing after transfemoral cardiac catheterization. *Am Surg* 1974, 40:193-194.
- Shah J, Middleton S, Derodra J: Massive scrotal haematoma: a complication of percutaneous transluminal angioplasty. *Int J Clin Pract* 2001, 55:722.
- Irace L, Stumpo R, Costa P, Trenti E, Bernucci P, Gallo P, Benedetti- Valentini F: Rupture of Dacron aorto-femoral graft. Case report. J Cardiovasc Surg (Torino) 1999, 40:879-881.
- Ceylan K, Yuksel Y, Hasan G, Alpaslan K: Inguinal approach in adult hydrocele

# JMSCR Vol||05||Issue||06||Page 23053-23056||June

surgery: preliminary randomized study. *Adv Ther* 2006, 23:159-162.

- Johal NS, Nitkunan T, O'Malley K, Cuckow PM: The two-stage repair for severe primary hypospadias. *Eur Urol* 2006, 50:366-371.
- 10. Joseph MG, O'Boyle PJ: The 'hitch-stitch' and drain technique for the prevention of inguinoscrotal haematoma following complicated inguinoscrotal surgery. *J R Coll Surg Edinb* 1989, 34:104-105.