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Case Report

Surgical treatment of thrombosed external hemorrhoids – Case report and review of literature

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ABSTRACT

Introduction: Although anorectal diseases in clinical practice are relatively common, thrombosed external hemorrhoids (TEH) are still a major therapeutic problem. TEH most frequently occurs in subjects with diagnosed hemorrhoidal disease.
Aim: The aim of this work was to report and analyze a case of TEH.
Case study: The patient, a 22-year-old male, attended Proctology Clinic with a severe anal pain. He had a history of pain which occurred the day before for the first time in his life. Physical examination showed no abnormalities. Digital rectal examination revealed TEH. Patient consented for incision of TEH under local anesthesia. Following the administration of anesthesia around TEH, incision was made and blood clot was evacuated. After 2 days the patient attended a follow-up appointment in the Proctology Clinic. After the incision was made the pain has resolved. From the time of TEH incision the patient did not receive any pain medication. After 5 months there was no recurrence of the disease.
Results and discussion: TEH is the cause of severe pain and itching. Major cause of the pain is the increased tension of external anal sphincter muscle. Diagnosis of TEH is made based on anamnesis, physical examination and additional tests. The most important part of a physical examination is digital rectal examination. Early diagnosis of thrombus and initiation of proper, most frequently surgical, treatment is an effective treatment method of this condition.
Conclusions: Treatment of TEH should be adjusted for each patient individually. The main factor determining the choice of treatment method is patient consent for a surgical intervention under local anesthesia. Excision or incision of the thrombosed hemorrhoid under local anesthesia in patients with TEH is a completely secure method, at the same time with a low number of complications.

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1. Introduction

Hemorrhoidal disease constitutes an important social problem of the XXI century.[1,2,3] It is estimated that every second person above 50 years of age suffers from hemorrhoids.[2,3,4] One-third of US society suffers from hemorrhoids – that is approximately 75 million people.[1,2,3,4] Hemorrhoids are cavernous tissue cushions located within the distal rectum and anal canal.[4,5,6] Depending upon their location in respect to pectinate line, one can define

- external hemorrhoids – situated below pectinate line, covered by squamous epithelium called anoderm, and
- internal hemorrhoids – situated above pectinate line, covered by columnar epithelium.[1,2,3,4,5,6]

Despite the fact that anorectal diseases are relatively frequent, until present the etiology of hemorrhoidal disease has not been established.[7,8,9,10] Main symptoms of thrombosed external hemorrhoids (TEH) reported by the patients are severe pain and visible single hard black hemorrhoid or single ruptured hemorrhoid with visible blood clot.[6,7,11,12] These symptoms are accompanied by bleeding.

2. Case study

The patient, a 22-year-old male attended Proctology Clinic in Mikolaj Pirogow Voivodeship Specialist Hospital in Lodz with severe anal pain. He had a history of pain which occurred the day before for the first time in his life. Physical examination showed no abnormalities. Digital rectal examination revealed TEH (Fig. 1).

Patient consented for the incision of TEH under local anesthesia. Following the administration of anesthesia around THE, incision was made and blood clot was evacuated (Figs. 2–5). After the incision the patient was discharged home. The recommended treatment comprised medicine based on a dry extract of *Ruscus aculeatus*, hesperidin and ascorbic acid (Cyclo 3 Fort, Pierre Fabre) at a dose of four tablets per day, suppositories containing a suspension of *Escherichia coli* bacteria and hydrocortisone (Posterisan H, Kadefarm) at a dose of one suppository twice

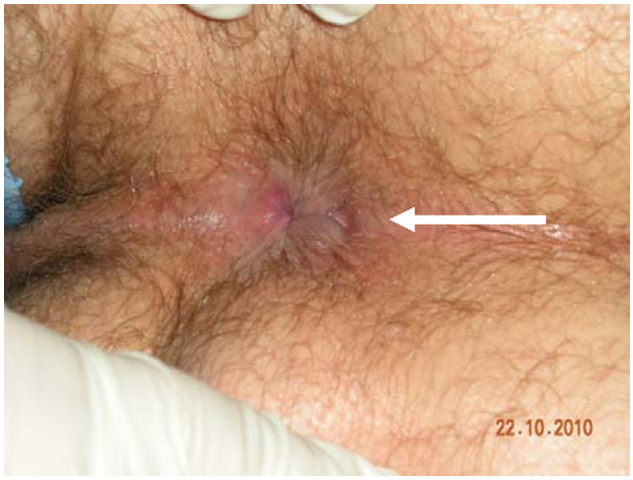

Fig. 1 – Thrombosed external hemorrhoid (indicated by arrow).

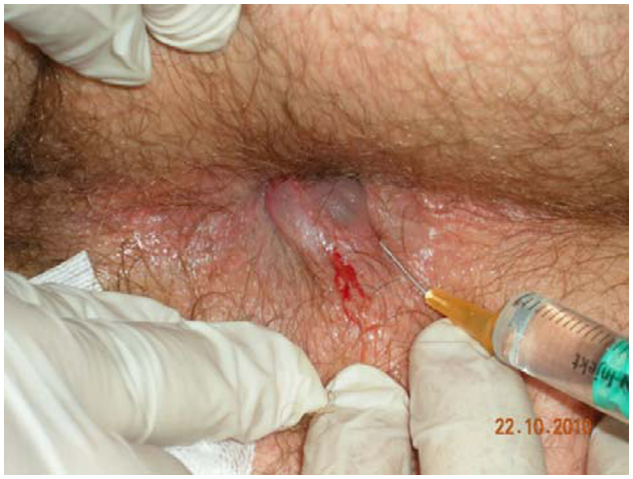

Fig. 2 – Administration of anesthesia in the area of thrombosed external hemorrhoid.

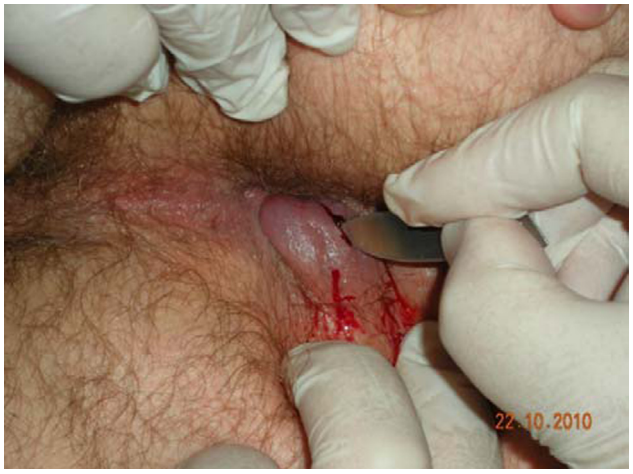

Fig. 3 – Incision of the thrombosed external hemorrhoid.

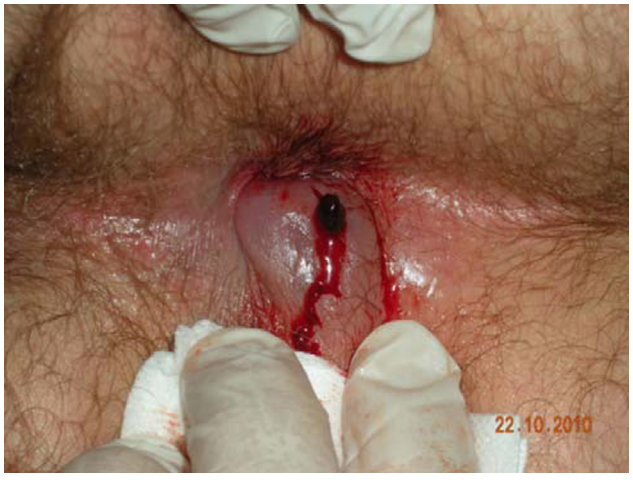

Fig. 4 – Evacuation of blood clot from the thrombosed external hemorrhoid after the incision.

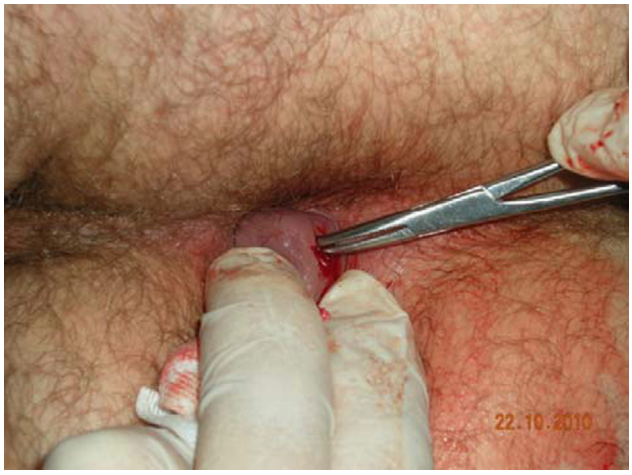

Fig. 5 – Control of the incision site of the thrombosed external hemorrhoid.

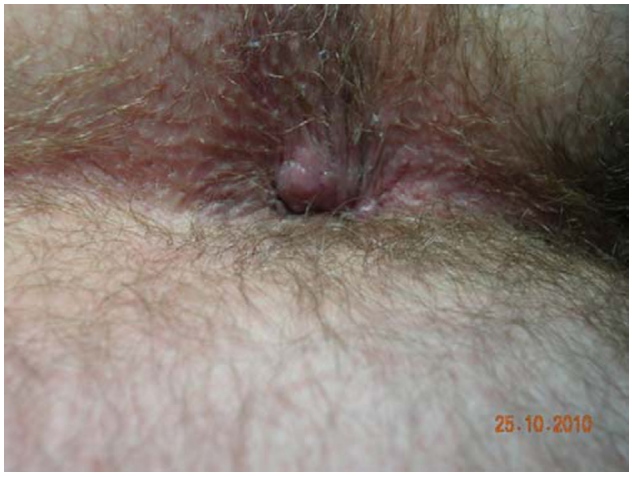

Fig. 6 – Anal area on the second day after the incision.

daily, as well as sitz baths of oak bark three times daily, made with water at a temperature of about 40°C for 20 minutes.

After 2 days the patient attended a follow-up appointment in the Proctology Clinic (Fig. 6). After the incision was made the pain has resolved. From the time of incision of TEH the patient did not receive any pain medication. The patient remains under control in Proctology Clinic of Mikolaj Pirogow Voivodeship Specialist Hospital in Lodz. After 5 months there was no recurrence of the disease.

3. Results and discussion

TEH is the cause of severe pain and itching.[11,13] Major cause of the pain is increased tension of external anal sphincter muscle.[11] Diagnosis of TEH is made based on anamnesis, physical examination and additional tests. The most important part of a physical examination is digital rectal examination performed in lateral or knee–elbow position.[2,3,4,5,11]

Etiology of TEH has not been completely explained, and thus preventive measures against this disease are also not known. It is believed that predisposing factors for thrombosis include internal hemorrhoids, young age, constipation, irritation or inflammation of the anus and exercise.[2,3,4,5,6,7,11,14]

In the medical literature many other names for TEH can be found: acute thrombosed external hemorrhoid,[12,15] acute hemorrhoidal disease,[16] anal hematoma,[17,18] perianal thrombosis[19] and perianal hematoma.[20] The authors of this article, like the majority of authors, believe that the name, thrombosed external hemorrhoid, is the best definition of this disease and this name was used in the very article.

In the medical literature there is an ongoing discussion on the treatment methods for TEH. Currently, surgical treatment including incision or excision of TEH is performed in patients who consent for a surgical intervention.[10,12,21] Conservative treatment is "limited" to patients who do not want to be treated surgically under local anesthesia.[15]

Jongen et al.[9] performed a retrospective study in 340 patients regarding satisfaction, complications, causes of relapse and effects of surgical treatment of TEH under local anesthesia. In 22 (6.50%) patients within 9 months following surgical treatment relapse has occurred. In patient assessment of treatment satisfaction, 269 (79.1%) subjects claimed that local anesthesia was a good form of thrombus treatment and that they would have chosen the same form of anesthesia in case of recurrence of the disease, 34 (10.0%) patients was not sure whether they would prefer the same form of anesthesia in case of relapse, and 37 (10.9%) would choose other form of anesthesia. Among 340 treated subjects, postoperative complications occurred in 8 (2.4%) patients: 1 (0.3%) had a postoperative bleeding and 7 (2.1%) perirectal abscess or fistula. However, the vast majority of subjects participating in the study did not have any complications after surgical treatment.

In the study conducted by Greenspon et al.[7] the effects of conservative and surgical treatment of TEH have been compared. The study was conducted in a group of 231 patients treated in the years 1990–2002. Conservative treatment was used in 51.5% of patients and surgical treatment in 48.5% of subjects. Both groups did not differ statistically in terms of age, gender and race. In 44.5% of subjects symptoms of TEH presented for the first time in their life. Recurrence of the disease was observed more frequently in patients treated conservatively (25.4%) than in subjects treated surgically (6.3%), and the average time of relapse in a group of conservative treatment was 7.1 month, while in a group of surgical treatment it was 25.0 months. Statistical analysis showed statistically significant differences in favor of surgery. In TEH patients, who had hemorrhoids excised or incised, a rapid pain resolution and longer remission period was observed, which resulted in lower risk of recurrence.

The authors of the very article recommend patients after incised thrombosed external hemorrhoid with sitz baths of chamomile or oak bark at a temperature of about 40°C–50°C for 10–20 minutes. This procedure reduces pain and substances in chamomile and oak bark have anti-inflammatory properties.[4,8,10,11] After the surgery patients are also recommended with corticosteroid suppositories and ointments (Posterisan H) in order to reduce pain, itching and increase resistance to infection in the anal area. It should be noted however, that ointments and suppositories containing

corticosteroids ought to be used in cycles of up to 7 days, since longer use may cause atrophy or contact dermatitis.

It is also recommended to use oral preparations containing dry extract of *Ruscus aculeatus*, hesperidin and ascorbic acid (Cyclo 3 Fort). Retrospective studies have shown that this product has a vasoconstrictive and venotonic properties, seals the walls of blood vessels, prevents edema and effusion and stagnating lymph and blood circulation, which reduce the risk of TEH recurrence.

It is also possible to use diosmin containing products, which reduce permeability and improve venous tone, thus reducing the risk of recurrence.

4. Conclusions

TEH treatment should be adjusted to each patient individually. The main factor determining the choice of treatment (conservative or surgical) is patients consent for surgical intervention under local anesthesia. Excision or incision of thrombosed hemorrhoid in TEH patients under local anesthesia is a completely secure method associated with a low number of complications. After excision or incision, anorectal pain resolves virtually in all patients.

Conflict of interest

None declared.

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