CASE REPORT

Doctor, I am Bleeding! Acute Scrotal Bleeding in a Middle-aged Man.

Nor Azam Kamaruzaman, Siti Shahirah Nadiah Ibrahim.

Department of Family Medicine, Kulliyyah of Medicine, International Islamic University Malaysia, Kuantan, Pahang, Malaysia.

Corresponding Author
Siti Shahirah Nadiah Binti Ibrahim
Department of Family Medicine
Kulliyyah of Medicine, International Islamic University Malaysia.
Email: shahirahsiti_369@yahoo.com

Submitted: 15/01/2024. Revised edition: 21/03/2024. Accepted: 29/03/2024. Published online: 01/06/2024.

Abstract

Acute bleeding from the scrotum is rare, and few causes exist; scrotal angiokeratoma is one of them. Angiokeratomas are violaceous skin papules that are benign and infrequent. Most individuals have asymptomatic lesions that do not need intervention, but occasionally, there may be pain, itching, and spontaneous bleeding. This is the case of a 50-year-old man who experienced abrupt and unexpected profuse scrotal bleeding.

Keywords: *angiokeratoma; scrotal bleeding; violaceous skin papules.*

Introduction

Angiokeratomas have several types which differ in location and clinical manifestation but share similar histopathological features [1]. While certain angiokeratomas are prevalent, some are rare; the angiokeratoma of Fordyce is represented in this case report. Angiokeratoma of Fordyce appears as solitary or multiple red or blue papules on the scrotum. However, the abdomen, thigh, and penis could also be involved [2]. The prevalence of angiokeratomas is approximately 0.16% among the general population, and it increases with age [3]. Although both males and females can have this disorder, it primarily occurs in men; hence, vulvar angiokeratoma is very uncommon [4].

Case presentation

A 50-year-old healthy gentleman with no known medical illness visited a primary health clinic to consult his family physician regarding an incident that occurred a day before. The incident took place just after he had finished taking his evening shower and was drying his body with a towel. Suddenly he noticed fresh blood dribbling onto the floor, which came from his scrotum. The bleeding was described as "profuse," and this was the first time it had occurred. However, it was painless, and he denied experiencing any trauma during or after the shower. Due to the absence of pain, he was unable to pinpoint the source of bleeding which continued for several minutes. He immediately called his friend, who is a Family Medicine Specialist, to report his problem.

Over the phone, his friend first assessed him for symptoms of shock, of which he had none. When asked, he denied having experienced prior constipation, hemorrhoids, fever, or bleeding tendencies. Then, he was instructed to apply continuous pressure to the bleeding site with a thick cloth. After a while, the bleeding stopped, allowing him to inspect the scrotal skin. No open wounds or bleeding points were observed. He was advised to continue applying pressure until the bleeding completely ceased. After ensuring there was no further bleeding, he was instructed to come for a clinical examination the following day. He was able to resume his normal daily activities.

During the clinic visit, he denied a history of trauma or excessive friction in the scrotal area. He did not notice any abnormalities in the genital region. His urinary and bowel functions were normal. He had no fever, skin rashes, weight loss, or loss of appetite. There was no family history of bleeding disorder, malignancy, or skin disease. He was an active long-distance cyclist but had never had a related saddle problem. He had no high-risk behaviour or taken any supplements. His last ride was four days prior to the incident.

Upon examination, there was no pallor, and his vital signs were normal. He was afebrile with a BMI of 25kg/m2. A general examination revealed a comfortable middle-aged man with normal and healthy skin. Examination of the genital and perineal region showed no grossly visible swelling, lesions, or wounds, and no active bleeding was observed. The overlying skin was not erythematous, with no hematomas, bruises, or open wounds seen at the bleeding site. The perianal area was normal, and no dilated veins were seen over the scrotum and lower limbs bilaterally.

Upon detailed inspection, multiple small, purplish-raised skin lesions measuring 2 to 5 mm were found scattered across the scrotal area. There were no similar skin lesions observed at other sites on the body, such as the penis, thighs, buttocks, groin, or lower trunk area. The lesions did not elicit itchiness or pain. Upon palpation, there was no tenderness in the scrotum region. Both testes were normal in consistency, and no varicocele or other masses were palpable. The transillumination test performed on the testes was normal. The inguinal lymph nodes were not palpable bilaterally.

No further investigation was done. A diagnosis of acute scrotal bleeding secondary to angiokeratoma of Fordyce at the scrotum was made. He received counselling on the etiology and was reassured of its benign nature.

Discussion

There are several causes for acute bleeding from the scrotum. Doctors must rule out perilous conditions, such as trauma, coagulopathy, or infection, before making the diagnosis of angiokeratoma of Fordyce. It was named after John Addison Fordyce, who originally described scrotal angiokeratoma in 1896 [2].

Usually asymptomatic, angiokeratomas are blue-to-red, 2-5 mm papules with a somewhat keratotic surface. There are two categories: dispersed and localized. Angiokeratoma corporis diffusum (Fabry disease) belongs to the first category. In contrast, other types are localized, which include Fordyce angiokeratoma (scrotum and vulva), sporadic angiokeratoma, Mibelli angiokeratoma, angiokeratoma circumscriptum, acral pseudo lymphomatous angiokeratoma in children (arms and legs), drug induce angiokeratoma, and penile angiokeratoma [5].

The most affected location is the scrotum, then the shaft and glans of the penis, and, less frequently, the leg, crural area, and bulbar conjunctiva. It is important to distinguish angiokeratoma from penile cancer, which typically presents as single and bigger lesions [2]. The histopathology reveals one or more dilated subepidermal blood vessels inside of enlarged dermal papillae [2]. Numerous cases of angiokeratomas have been documented in the context of varicocele or other disorders involving elevated venous pressure, such as genitourinary tract tumours and hernias. However, the rise in venous pressure could be so slight that it goes unnoticed, resulting in capillary dilatation only at a location where tissue pressure is most likely to be lowest [2].

Friction is identified as the primary cause of the epidermal alterations seen in all types of angiokeratoma. However, there are no reported instances of a high incidence of scrotal angiokeratoma among high-performance cyclists. Therefore, advising against cycling is unnecessary in such cases.

The main morbidities associated with angiokeratoma comprise of bleeding, anxiety, and occasionally overtreatment resulting from incorrect diagnoses. They usually don't need to be treated. Cryotherapy, laser, electrocoagulation, or excision may be employed if medical intervention is required, particularly in cases of persistent bleeding. This necessitates referral to dermatology. Laser treatment can also be employed for cosmetic purposes [5]. The patient also needs to be advised that angiokeratoma does not resolve spontaneously, and the skin lesions may become warty over time.

Conclusion

An asymptomatic case of scrotal angiokeratoma might go unnoticed until the patient develops complications such as bleeding or pain. Even in such cases, symptomatic angiokeratomas might also be missed, as primary care doctors do not often encounter them. Therefore, embarrassment, unnecessary anxiety, misdiagnosis, or over-treatment might be the risks faced by patients. Hence, doctors in primary care must have an awareness of angiokeratoma to avoid those risks, as this condition is benign. Primary care doctors also need to rule out sinister conditions such as skin cancer before diagnosing a patient with angiokeratoma. Patients should be advised to monitor their symptoms and, if bleeding is persistent, may require intervention to avoid complications such as anaemia or thrombosis. Patients might also need to be referred to a dermatologist if diagnosis becomes challenging, such as when the condition does present typically or requires a biopsy.

Acknowledgement

The authors thank the patient for his permission and cooperation in writing this case report.

Conflict of interest

None to declare.

Figure 1. The skin lesion papules size ranging from 2-3 mm.

Figure 2. Details of the appearance of the lesion.

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