



International Journal of Surgery Science

E-ISSN: 2616-3470

P-ISSN: 2616-3462

© Surgery Science

www.surgeryscience.com

2020; 4(2): 156-157

Received: 11-02-2020

Accepted: 12-03-2020

Dr. Anuradha Panchal

Department of General Surgery,
D.Y. Patil School of Medicine,
Navi Mumbai, Maharashtra, India

Dr. Nida Khan

Department of General Surgery,
D.Y. Patil School of Medicine,
Navi Mumbai, Maharashtra, India

Dr. Manish Kumar

Department of General Surgery,
D.Y. Patil School of Medicine,
Navi Mumbai, Maharashtra, India

Dr. Abhishek Mahadik

Department of General Surgery,
D.Y. Patil School of Medicine,
Navi Mumbai, Maharashtra, India

Dr. Dipesh Goel

Department of General Surgery,
D.Y. Patil School of Medicine,
Navi Mumbai, Maharashtra, India

Dr. Shweta R Verma

Department of General Surgery,
D.Y. Patil School of Medicine,
Navi Mumbai, Maharashtra, India

Corresponding Author:

Dr. Manish Kumar

Department of General Surgery,
D.Y. Patil School of Medicine,
Navi Mumbai, Maharashtra, India

Angiokeratoma of Fordyce: A diagnostic enigma

Dr. Anuradha Panchal, Dr. Nida Khan, Dr. Manish Kumar, Dr. Abhishek Mahadik, Dr. Dipesh Goel and Dr. Shweta R Verma

DOI: <https://doi.org/10.33545/surgery.2020.v4.i2c.410>

Abstract

Angiokeratomas are rare, benign ectasias of scrotal dermal vessels with a male preponderance. They are usually asymptomatic, although rarely they may present as an acute bleed. We present a case report of a 27 year old male with multiple large papules over scrotum associated with intense pruritis. Excision of scrotal skin was performed. Patient was followed up for one year, without any recurrence.

Keywords: Angiokeratoma, diagnostic enigma, male preponderance

Introduction

Angiokeratoma of Fordyce is a benign condition presenting as red to purple papules over scrotum. It is due to anomalous ectatic veins ^[1]. It may present as multiple painless papules or as scrotal bleed ^[2]. It commonly affects scrotum, though penis may rarely be involved, even rare if the affliction of vulva ^[3]. Treatment options include electrocoagulation, yttrium laser, electrocoagulation and excision ^[4].

Case Report

A 22 year old male patient presented to surgical OPD with multiple papules over scrotum since 2 years. The papules were reddish in colour, few millimeters in size and had increased in number over the course of 2 years. Patient had developed itching over the papules over the past 6 months which was causing significant discomfort and had brought him to the OPD. He had no co morbidities. On examination, patient had multiple reddish brown papules, 2-6mm in size, over anterior surface of right scrotum, without any tenderness or active bleed. General and Systemic examinations were normal. Biopsy from the lesion confirmed diagnosis of angiokeratoma of Fordyce. Patient was explained various treatment options and potential complications. Patient opted for surgical excision. Under spinal anesthesia, excision of a 3 x 5cm area of right scrotal skin with the angiokeratomas and primary closure was performed. Patient was discharged on post operative day 2. Patient was followed up for one year without any recurrence of the angiokeratoma.

Discussion

Fordyce first described Angiokeratoma in 1896 ^[5]. They are superficial, circumscribed lesions with vascular ectasia and hyperkeratotic surface ^[6]. It is commoner in older individuals. It has a male preponderance and occur commonly on the scrotum, although it can also affect the vulva in females. Rarely they are seen on the shaft of penis or glans. It presents with multiple papules, 1 to 6mm in diameter, that may be asymptomatic or bleed due to trauma or during sexual intercourse ^[7]. The exact etiology is unknown. They may be isolated lesions or a part of Fabry's disease, urinary tract tumours, intra abdominal tumours and varicoceles ^[8]. Vulval angiokeratomas are associated with use of oral contraceptive pills, localised venous hypertension, phlebectasia, obesity ^[9]. Biopsy is essential to rule out other differentials including melanoma, pyogenic granuloma and angiosarcoma ^[10]. They are mostly asymptomatic or may present with pruritis or as an acute bleed. Histopathology shows marked dilatation of superficial dermal blood vessels with collarette at the periphery of the lesion. Treatment options include electrofulgration, cryotherapy, laser ablation, shave excision and surgical excision. Laser used is Nd:YAG or 532 nm KTP ^[11, 12]. Surgical excision of affected scrotal skin can be performed in case of extensive disease or large angiokeratomas. Recurrence is common.

Conclusion

Angiokeratoma of Fordyce is a rare condition that is often misdiagnosed. It is usually asymptomatic but may present with torrential bleed. Treatment is either for cosmesis, or symptomatic angiokeratomas, with laser ablation, cryotherapy or surgical excision.



Fig 1: Preop image of angiokeratoma of Fordyce



Fig 2: Excised scrotal skin with angiokeratoma

Angiokeratoma of the Scrotum. E-medicine. Available from: <http://www.emedicine.medscape.com>

8. Trickett R, Dowd H. Angiokeratoma of the scrotum: A case of scrotal bleeding. *Emerg Med J.* 2006; 23:e57.
9. Schiller PI, Itin PH. Angiokeratoma: an update. *Dermatology.* 1996; 193:275-282. doi: 10.1159/000246270
10. Fogagnolo L, Cintra ML, Velho PE. Angiokeratoma of the vulva. *An Bras Dermatol.* 2011; 86(2):333-335. doi: 10.1590/S0365-05962011000200017
11. Zeng Y, Zhan K, Xie WL, Lin QZ. Angiokeratoma of Fordyce response to long pulsed Nd:YAG laser treatment. *Dermatol Ther (Heidl).* 2016; 29:48-51. doi: 10.1111/dth.12296
12. Kearney TC, Tanzi E, Alster T. Comparison of 532 nm potassium titanyl phosphate laser and 595 nm pulsed dye laser in the treatment of erythematous surgical scars: a randomized, controlled, open-label study. *Dermatol Surg.* 2016; 42:70-76. doi: 10.1097/DSS.0000000000000582

References

1. Hall Anthony. Angiokeratoma of Fordyce. *Atlas of Male Genital Dermatology.* Springer, Cham, 2019, 19-20.
2. Ghosh Sudip Kumar, Debabrata Bandyopadhyay. Acute scrotal bleeding. *Journal of emergencies, trauma, and shock.* 2010; 3(4):416-417.
3. Kudur MH, Hulmani M. Giant angiokeratoma of Fordyce over the vulva in a middle-aged woman: Case report and review of literature. *Indian J Dermatol.* 2013; 58:242.
4. Carrasco L, Izquierdo MJ, Farina MC *et al.* Strawberry glans penis: a rare manifestation of angiokeratomas involving the glans penis. *Br J Dermatol.* 2000; 142:1256-7.
5. Izaki Masakatsu. Angiokeratoma of the scrotum (Fordyce). *The Keio Journal of Medicine.* 1952; 1(1):61-68.
6. James WD, Berger TG, Elston DM. 10th ed. Philadelphia: Saunders Elsevier; Andrew's diseases of the skin, 2006.
7. Khachemoune A, Bae-Harboe Y, Blyumin ML.