

Photo Quiz

Multiple Vesicles and Bullae on the Scrotum

ENGIN SENEL, MD, *Clinic of Dermatology, Çankiri State Hospital, Çankiri, Turkey*

ZEYNEL ABIDIN DEMIR, MD, *Clinic of Urology, Çankiri State Hospital, Çankiri, Turkey*

YASEMIN DÖLEK, MD, *Pathology Laboratory, Çankiri State Hospital, Çankiri, Turkey*

The editors of *AFP* welcome submissions for Photo Quiz. Guidelines for preparing and submitting a Photo Quiz manuscript can be found in the Authors' Guide at <http://www.aafp.org/afp/photoquizinfo>. To be considered for publication, submissions must meet these guidelines. E-mail submissions to afpphoto@aafp.org. Contributing editor for Photo Quiz is John E. Delzell, Jr., MD, MSPH.

A collection of Photo Quizzes published in *AFP* is available at <http://www.aafp.org/afp/photoquiz>.



Figure 1.

A 64-year-old man presented with lesions on the right side of his scrotum (Figure 1); they had been present for nearly 20 years. The patient reported no pain, oozing, or itching, and he had no history of trauma, injury, radiotherapy, surgery, or venereal infection.

Examination revealed multiple fluid-filled, translucent vesicles and bullae. The lesions were intact and were not fragile. A shave biopsy was obtained.

Question

Based on the patient's history and physical examination findings, which one of the following is the most likely diagnosis?

- A. Angiokeratomas of Fordyce.
- B. Idiopathic scrotal calcinosis.
- C. Leukemia cutis.
- D. Lymphangioma circumscriptum.
- E. Steatocystoma multiplex.

See the following page for discussion.

Photo Quiz

Discussion

The answer is D: lymphangioma circumscrip-tum. Shave biopsy showed slight acanthosis in the epidermis and multiple dilated lymphatic vessels in the papillary dermis (Figure 2).

Lymphangiomas can be classified into three main types: cavernous, circumscrip-tum (capillary), and cystic.¹ Lymphangioma circumscrip-tum, the most common type, is the benign dilatation and malformation of inner lymphatic channels located in the deep dermal and subcutaneous tissues.^{1,2} The dis-ease often affects the proximal portions of the extremities, but scrotal, vulvar, and mucosal lesions are rare. Lymphangioma circumscrip-tum is more common in women than in men. It can occur at any age, but usually appears at or soon after birth.¹

The clinical presentation is characterized by thin-walled vesicles and bullae, which are filled with translucent lymphatic fluid. The lesions range from 1 to 5 mm in size. His-topathologic features include numerous cystic lymphatic spaces lined with a flattened endothelium in the dermis. There may be overlying hyperkeratosis, acanthosis, hem-orrhage, and mononuclear inflammatory cells.^{1,3}

Angiokeratomas of Fordyce are well-circumscribed, vascular lesions characterized by red or blue papules (i.e., dilated vessels). They are commonly associated with severe varicosity or varicocele. Patients often report bleed-ing after sexual intercourse or excoriation of the lesions.⁴

Idiopathic scrotal calcinosis is a rare, benign condi-tion that causes hard, yellowish nodules. The dermal nodules consist of calcium deposits under a normal epidermis. They are usually asymptomatic, but may itch or produce discharge.⁵

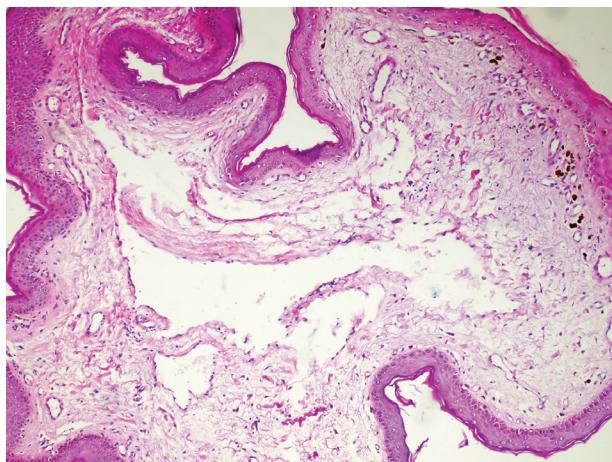


Figure 2. Shave biopsy of lymphangioma circumscrip-tum lesions showed slight acanthosis in the epidermis and multiple dilated lymphatic vessels in the papillary dermis.

Summary Table

Condition	Characteristics
Angiokeratomas of Fordyce	Red or blue papules; bleeding after sexual intercourse or excoriation of the lesions; associated with severe varicosity or varicocele
Idiopathic scrotal calcinosis	Hard, yellowish dermal nodules consisting of calcium deposits under a normal epidermis; usually asymptomatic, but may itch or produce discharge
Leukemia cutis	Papules, but mostly nodules; accompanied by hepatosplenomegaly or a high serum leukocyte count; histopathology shows diffuse, band-like or nodular infiltration of leukemic cells
Lymphangioma circumscrip-tum	Thin-walled vesicles and bullae filled with translucent lymphatic fluid; histopathology shows numerous cystic lymphatic spaces lined with a flattened endothelium in the dermis
Steatocystoma multiplex	Multiple dermal cysts that are localized or widespread; asymptomatic or inflammatory; histopathology shows well-encapsulated cysts with cyst walls

Leukemia cutis is the infiltration of neoplastic leuko-cytes into the skin, causing clinically identifiable cuta-neous lesions. It is associated with a poor prognosis. The lesions consist of papules, but mostly nodules that are usually asymptomatic and typically seen with the nodular morphology. Leukemia cutis can be accompanied by hepatosplenomegaly or a high serum leukocyte count. Histopathology shows diffuse, band-like or nodular infiltration of leukemic cells.⁶

Steatocystoma multiplex is characterized by mul-tiple dermal cysts involving the pilosebaceous units. The dermal cysts may be localized or widespread, and asymptomatic or inflammatory. Histopathology shows well-encapsulated cysts with cyst walls.⁷

Address correspondence to Engin Senel, MD, at enginsenel@engin senel.com. Reprints are not available from the authors.

Author disclosure: No relevant financial affiliations.

REFERENCES

1. Patel GA, Schwartz RA. Cutaneous lymphangioma circumscrip-tum: frog spawn on the skin. *Int J Dermatol.* 2009;48(12):1290-1295.
2. Sims SM, McLean FW, Davis JD, Morgan LS, Wilkinson EJ. Vulvar lymphangioma circumscrip-tum: a report of 3 cases, 2 associated with vulvar carcinoma and 1 with hidradenitis suppurativa. *J Low Genit Tract Dis.* 2010;14(3):234-237.
3. Turan V, Ergenoglu M, Yeniel O, Ulukus M. Vulvar lymphangioma circumscrip-tum. *Int J Gynaecol Obstet.* 2009;107(3):256-257.
4. Trickett R, Dowd H. Angiokeratoma of the scrotum: a case of scrotal bleeding. *Emerg Med J.* 2006;23(10):e57.
5. Khalilou A, Yazami OE, Mellas S, Tazi MF, El Fassi J, Farih MH. Idiopathic scrotal calcinosis: a non-elucidated pathogenesis and its surgical treatment. *Rev Urol.* 2011;13(2):95-97.
6. Malbora B, Senel E, Avci Z, Ozbek N. Purpuric nodules and macules on the scalp of an 18-month-old boy [published correction appears in *Skinned.* 2011;9(1):66]. *Skinned.* 2010;8(5):305-306.
7. Senel E. Question: can you identify this condition? Steatocystoma mul-tiplex. *Can Fam Physician.* 2010;56(7):667. ■