

# Pink Nodule Behind the Ear

Ryan Jay, DO; Sean Kirk, OMS-III; Shannon C. Trotter, DO



A 62-year-old man presented to the dermatology office with a 1.5-cm, pink, rubbery nodule behind the left ear that sometimes was tender. He stated that the lesion gradually grew in size over the last 2 years, and it developed after he was fitted for new glasses.

## WHAT'S YOUR **DIAGNOSIS?**

- a. acanthoma fissuratum
- b. cylindroma
- c. keloid
- d. nodular basal cell carcinoma
- e. squamous cell carcinoma

PLEASE TURN TO **PAGE E36** FOR THE DIAGNOSIS

From the Ohio University Heritage College of Osteopathic Medicine, Dublin. Dr. Trotter also is from the OhioHealth Dermatology Residency Program, Columbus, and is in private practice at Dermatologists of Central States, Canal Winchester, Ohio.

The authors report no conflict of interest.

Correspondence: Ryan Jay, DO, OhioHealth Riverside Methodist Hospital, 3535 Olentangy River Rd, Columbus, OH 43214 (ryancjaydo@gmail.com).  
doi:10.12788/cutis.0611

## THE DIAGNOSIS: Acanthoma Fissuratum

**A**canthoma fissuratum is a skin lesion that results from consistent pressure, typically from ill-fitting eyeglass frames.<sup>1</sup> The chronic irritation leads to collagen deposition and inflammation that gradually creates the lesion. Many patients never seek care, making incidence figures undeterminable.<sup>2</sup> It usually presents as a firm, tender, flesh-colored or pink nodule or plaque with a central indentation from where the frame rests. This indentation splits the lesion in half and classically gives the appearance of a coffee bean.<sup>1</sup> The repeated minor trauma at this point of contact also may lead to centralized ulceration, which further blurs the diagnosis to include basal cell carcinoma (BCC).<sup>3,4</sup> Although the postauricular groove is the most cited location, lesions also may occur at other contact points of the glasses, such as the lateral aspect of the bridge of the nose and the superior auricular sulcus.<sup>5</sup> Acanthoma fissuratum is not limited to the external head. Other etiologies of local trauma and pressure have led to its diagnosis in the upper labioalveolar fold, posterior fourchette of the vulva, penis, and external auditory canal.<sup>6-9</sup>

The diagnosis of acanthoma fissuratum mainly is clinical; however, due to its similar appearance to BCC and other lesions, a biopsy can be taken to support the diagnosis; a biopsy was not performed in our patient. The main features seen on histopathology include acanthosis, hyperkeratosis, variable parakeratosis, and perivascular nonspecific inflammatory infiltration. The epidermis may reflect the macroscopic frame indentation with central attenuation of the epidermis, which potentially is filled with inflammatory cells or keratin.<sup>5</sup>

Treatment normally encompasses removing the ill-fitting frames or fixing the fit, which gradually leads to reduction of the lesion.<sup>4,5</sup> This occurred in our patient, who changed eyeglasses and saw an 80% resolution of the lesion in 8 months. Such improvement after removal of a trauma-inducing stimulus would not be seen in malignancies (eg, BCC, squamous cell carcinoma [SCC]), keloids, or cylindromas. If the granulation tissue does not regress or recurs, other potential treatments include excision, intralesional corticosteroids, and electrotherapy.<sup>5</sup>

Basal cell carcinoma is a common nonmelanoma skin cancer that most often presents on the sun-exposed areas of the head and neck, especially the cheeks, nasolabial folds, and forehead. Although the nodular subtype may clinically appear similar to acanthoma fissuratum, it more typically presents as a pearly papule or nodule with a sharp border, small telangiectases, and potential ulceration.<sup>10</sup> Squamous cell carcinoma is another common nonmelanoma skin cancer that often arises in sun-exposed areas, which can include the postauricular

area. Although the lesion can be associated with chronic wounds and also can grow vertically, SCC typically has a scaly and more hyperkeratotic surface that can ulcerate.<sup>1</sup> A cylindroma is a benign sweat gland tumor that most commonly presents on the head and neck (also known as the turban tumor), though it can develop on the ear. It appears as solitary or multiple nodules that often are flesh colored, red, or blue with a shiny surface.<sup>1</sup> Cylindromas are not known to be associated with chronic local trauma or irritation,<sup>11</sup> such as wearing ill-fitting eyeglasses. Unlike acanthoma fissuratum, the treatment of cylindromas, BCC, and SCC most often involves excision.<sup>1</sup> A keloid presents as a flesh-colored, red, or purple exophytic plaque that is composed of dense dermal tissue and progressively forms after local trauma. Although keloids can spontaneously develop, they commonly form on the ears in susceptible individuals after skin excisions including prior keloid removal, piercings, repairment of auricular traumas, or infections.<sup>1</sup> The patient's coffee bean–like lesion that coincided with wearing new eyeglasses better fits the diagnosis of acanthoma fissuratum than a keloid. Additionally, keloids typically do not regress without treatment. Keloid treatment consists of intralesional steroid injections, occlusive silicone dressings, compression, cryotherapy, radiation, and excisional surgery.<sup>1</sup>

### REFERENCES

- Sand M, Sand D, Brors D, et al. Cutaneous lesions of the external ear. *Head Face Med*. 2008;4. doi:10.1186/1746-160X-4-2
- Orengo I, Robbins K, Marsch A. Pathology of the ear. *Semin Plast Surg*. 2011;25:279-287. doi:10.1055/s-0031-1288920
- Ramroop S. Successful treatment of acanthoma fissuratum with intralesional triamcinolone acetonide. *Clin Case Rep*. 2020;8:702-703. doi:10.1002/ccr3.2708
- Delaney TJ, Stewart TW. Granuloma fissuratum. *Br J Dermatol*. 1971;84:373-375. doi:10.1111/j.1365-2133.1971.tb14235.x
- Deshpande NS, Sen A, Vasudevan B, et al. Acanthoma fissuratum: lest we forget. *Indian Dermatol Online J*. 2017;8:141-143. doi:10.4103/2229-5178.202267
- Surron RL Jr. A fissured granulomatous lesion of the upper labioalveolar fold. *Arch Dermatol Syph*. 1932;26:425. doi:10.1001/archderm.1932.01450030423004
- Kennedy CM, Dewdney S, Galask RP. Vulvar granuloma fissuratum: a description of fissuring of the posterior fourchette and the repair. *Obstet Gynecol*. 2005;105:1018-1023. doi:10.1097/01.AOG.0000158863.70819.53
- Lee JL, Lee YB, Cho BK, et al. Acanthoma fissuratum on the penis. *Int J Dermatol*. 2013;52:382-384. doi:10.1111/j.1365-4632.2011.04903.x
- Gonzalez SA, Moore AGN. Acanthoma fissuratum of the outer auditory canal from a hearing aid. *J Cutan Pathol*. 1989;16:304.
- Fania L, Didona D, Morese R, et al. Basal cell carcinoma: from pathophysiology to novel therapeutic approaches. *Biomedicines*. 2020;8:449. doi:10.3390/biomedicines8110449
- Chauhan DS, Guruprasad Y. Dermal cylindroma of the scalp. *Natl J Maxillofac Surg*. 2012;3:59-61. doi:10.4103/0975-5950.102163