the middle ear, the sella turcica, the parathyroid glands, the mediastinum, and the rectum[3–8]. Although rare, bilateral presentation is also possible[2]. Histology shows mucous and/or serous salivary gland structures, often with an associated ductal component (dilated, collapsed, or absent) and chronic periductal inflammation. Its association with other congenital anomalies is very rare[2].

Surgical treatment is indicated for diagnostic purposes and to prevent inflammatory processes and potential neoplastic degeneration. In fact, in the largest series available in the literature, with 24 cases of salivary gland heterotopia, associated malignant tumors were found in 6 cases (3 mucoepidermoid tumors, 2 acinar cell carcinomas, and 1 adenocarcinoma)[9]. While malignancy in a heterotopic area must be considered in cases of salivary gland carcinoma outside the salivary glands, metastatic dissemination should also be ruled out[2,9,10]. While no data exist in the literature, ultrasound may be particularly useful in the differential diagnosis with other more common diseases and in preoperative planning. Based on our case and the literature, in the event of a nodular lesion in a typical location, with secretion and with ultrasound showing no characteristics of a cystic lesion, we must include salivary gland heterotopia in the differential diagnosis.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

References

1. Youngs LA, Scofield HH. Heterotopic salivary gland tissue in the lower neck. Arch Path. 1967;83:550–6.
2. Haemel A, Gnepp DR, Carlsten J, Robinson-Bostom L. Heterotopic salivary gland tissue in the neck. J Am Acad Dermatol. 2008;58:251–6.
3. Afanas'ev VV, Starodubtsev VS. Salivary gland heterotopia in the bone tissue of the mandible. Stomatologiia (Mosk). 1995;74:69–70.
4. Enoz M, Suoglu Y. Salivary gland choristoma of the middle ear. Laryngoscope. 2006;116:1033–4.
5. Tatter SB, Edgar MA, Klibanski A, Swearingen B. Symptomatic salivary-rest cyst of the sella turcica. Acta Neurochir (Wien). 1995;135:150–3.
6. Edwards PC, Bhuiya T, Kahn LB, Fantasia JE. Salivary heterotopia of the parathyroid gland: A report of two cases and review of the literature. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2005;99:590–3.
7. Feigin GA, Robinson B, Marchevsky A. Mixed tumor of the mediastinum. Arch Pathol Lab Med. 1986;110:80–1.
8. Weitzner S. Ectopic salivary gland tissue in submucosa of rectum. Dis Colon Rectum. 1983;26:814–7.
9. Daniel E, McGuirt WF. Neck masses secondary to heterotopic salivary gland tissue: A 25-year experience. Am J Otolaryngol. 2005;26:96–100.
10. Ferlito A, Bertino G, Rinaldo A, Mannara GM, Devaney KO. A review of heterotopia and associated salivary gland neoplasms of the head and neck. J Laryngol Otol. 1999;113:299–303.

P. Chicharro[a,*], P. Rodríguez-Jiménez[a], J. Fraga[b], M. Llamas-Velasco[a]

[a] *Servicio de Dermatología, Hospital Universitario de La Princesa, Madrid, Spain*
[b] *Servicio de Anatomía Patológica, Hospital Universitario de La Princesa, Madrid, Spain*

* Corresponding author.
E-mail address: somniem@gmail.com (P. Chicharro).

https://doi.org/10.1016/j.adengl.2020.02.002

Comet Sign in Dermatitis Due to *Pyemotes* Species☆

Signo de la cometa en la dermatitis por *Pyemotes*

To the Editor:

The presence of linear or serpiginous tracks is a characteristic cutaneous sign of certain parasitic conditions. Although autochthonous cases of cutaneous larva migrans have been described in Spain, most cases are diagnosed in travelers from tropical regions.[1] However, in patients who have not traveled to tropical areas this finding entails a broader differential diagnosis, which should include comet sign. We describe the presence of this clinical sign in 2 adult patients with dermatitis caused by *Pyemotes* species.

A 25-year-old woman with no relevant dermatological history consulted in May due to the presence of pruritic lesions on the legs that had appeared 72 hours earlier. She had no extracutaneous signs and had not applied any topical preparations. Physical examination revealed several polygonal macules, from which painless erythematous tracks originated (Fig. 1). The patient reported having spent several hours in a rural accommodation in Segovia that was rarely visited during the rest of the year. Most of the furniture was wooden and the patient had noticed small holes in the wood accompanied by sawdust, signs of woodworm infestation. Dermoscopy revealed a microvesicle at the center of each polygonal macule (Fig. 2). Skin biopsy showed a dermal infiltrate composed of eosinophils and lymphocytes. No epidermal changes were evident. Betamethasone cream was indicated as a symptomatic treatment, and resulted in lesion resolution after 72 hours (Fig. 3).

Figure 1 Multiple lesions exhibiting the comet sign on the leg of Patient 1.

☆ Please cite this article as: Pulido Pérez A, Bergón-Sendín M, Hernández-Aragüés I, Suárez-Fernández R. Signo de la cometa en la dermatitis por *Pyemotes*. Actas Dermosifiliogr. 2021;112:951–952.

Figure 2 Dermoscopic image of the lesions from Patient 1.

Figure 3 Lesions exhibiting the comet sign on the abdomen of Patient 2.

A 58-year-old woman was seen in June for multiple erythematous edematous macules with a central microvesicle. Serpiginous tracks similar to but larger than those described in case 1 emerged from the macules. The clinical picture had appeared 72 hours earlier, after the patient had spent a week in a rural accommodation in northern Italy. Initially, she had attended the emergency department of an Italian health center, where she had been prescribed doxycycline. Owing to the progression of the lesions, she had attended our hospital upon her return to Spain in order to obtain a second opinion. When asked about the characteristics of the place where she had stayed, she described a forest cabin built of and entirely furnished with wood. When informed about the suspected diagnosis of *Pyemotes* dermatitis, she requested an entomological study of the cabin. The results revealed the presence of woodworm in wooden furniture, which was parasitized by mites of the genus *Pyemotes*. The patient's condition resolved fully after application of methylprednisolone aceponate emulsion for 14 days.

Both cases involve the characteristic findings of so-called *Pyemotes* dermatitis. This condition should be suspected in individuals who present with pruritic lesions predominantly in exposed areas and who have had contact with wooden furniture in rarely frequented accommodations that are usually closed for long periods. In these types of buildings it is common to find larvae of beetle species that burrow into wood (woodworm). Often, these larvae are parasitized by mites of the genus *Pyemotes*, which cause the associated dermatological presentation. Occupational outbreaks have been documented among field and harvest workers, as *Pyemotes* species can parasitize other insects that infect wheat, barley, peas, and other crops.[2,3] Skin lesions develop after contact with the mite (approximately 24 h), without signs of epidermal penetration, resulting in a consequent inflammatory reaction. Because completion of the life cycle of *Pyemotes* species requires warm temperatures (25 °C), most cases published in the literature occurred during the months of May to October.[4] This epidemiological detail can help orient the diagnosis.

Clinically, *Pyemotes* dermatitis can manifest with erythematous, edematous papules with a central dot or vesicle, similar to those caused by other arthropod bites, although the comet sign is a key characteristic.[5] Described by Del Giudice et al. in 2007,[6] this sign is considered a unique feature of *Pyemotes* dermatitis. The initial lesion consists of an erythematous macule, from which a linear or serpiginous track emerges after 12 to 24 hours. In contrast to bacterial lymphangitis, the track is painless and does not follow a defined lymphatic path to the corresponding drainage node. The differential diagnosis also includes cutaneous larva migrans syndrome, in which the cutaneous tracks cause alterations in the skin surface, a consequence of the movement of the larvae through the epidermis; and larva currens (caused by *Strongyloides stercoralis*), in which the tracks progress rapidly at a speed of approximately 10 cm per hour. Treatment is symptomatic: this condition self-resolves once contact with the mite ceases. Topical steroids and emollients can help control itching, which is the main symptom reported by patients.

References

1. Hidalgo Garcia Y, Fernandez Sanchez C, Rodriguez Villar D. Cutaneous larva migrans acquired in Asturias, Spain. Med Clin (Barc). 2016;147:567–8.
2. Rodriguez-Casado MJ, Cerro-Gonzalez R, Martin-Blazquez JL, Vazquez-Contioso M. Outbreak of Pyemotes dermatitis in an elementary school. Enferm Infecc Microbiol Clin. 2004;22:370–1.
3. Tomczyk-Socha M, Jedrzejewska-Jurga K, Limburska J, Tomczyk J. Outbreak of occupational dermatitis associated with *Pyemotes ventricosus*. JAMA Dermatol. 2017;153:686–8.
4. Del Giudice P, Blanc-Amrane V, Bahadoran P, Caumes E, Marty P, Lazar M, et al. *Pyemotes ventricosus* dermatitis, southeastern France. Emerg Infect Dis. 2008;14:1759–61.
5. Bellido-Blasco JB, Arnedo-Pena A, Valcuende F. Comet sign (and other) in *Pyemotes* dermatitis. Emerg Infect Dis. 2009;15:503–4.
6. Del Giudice P, Caumes E, Boissy C, Leduff F, Delaunay P, Blanc-Amrane V, et al. An outbreak of creeping eruption in southern France. Br J Dermatol. 2007;157:824–5.

A. Pulido Pérez*, M. Bergón-Sendín, I. Hernández-Aragüés, R. Suárez-Fernández

Servicio de Dermatología, Hospital General Universitario Gregorio Marañón, Madrid, Spain

* Corresponding author.
E-mail address: ana.pulido@salud.madrid.org (A. Pulido Pérez).

https://doi.org/10.1016/j.adengl.2021.09.010