

Single Case

Dermoscopic Features of Heterotopic Salivary Gland Tissue in the Neck: Report of a Case

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Keywords

Ectopic salivary gland tissue · Heterotopic salivary gland tissue · Dermoscopy · Pathology · Rare disease

Abstract

Introduction: Heterotopic salivary gland tissue (HSGT) is diagnosed when salivary gland tissue is found in areas other than the major or minor salivary glands. No dermoscopic findings of HSGT have been reported. **Case Presentation:** This case report gives the dermoscopic findings of a 45-year-old woman with HSGT who presented with a longstanding pale red macule on her neck, characterized by repeated clear fluid discharge. Dermoscopic examination showed a red dot with a pale pink halo and telangiectasia throughout the lesion. An excisional biopsy confirmed the diagnosis of HSGT, revealing the presence of mucous and serous salivary glandular structures within subcutaneous fat tissue. It has been reported that HSGT is associated with periductal lymphocytic infiltration, which was also observed in this case. **Conclusion:** We think that the “red dot with a pale pink halo” is a unique dermoscopic finding of HSGT, which is rarely observed in branchial anomalies.

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Published by S. Karger AG, Basel

Introduction

Heterotopic salivary gland tissue (HSGT) is characterized by the presence of salivary gland tissue in areas other than the major or minor salivary glands [1]. It is typically found in the neck, but may also be found in the external auditory canal, tongue, thyroid gland, and hypophysis [1, 2]. This report on HSGT is the first to feature dermoscopic observations.

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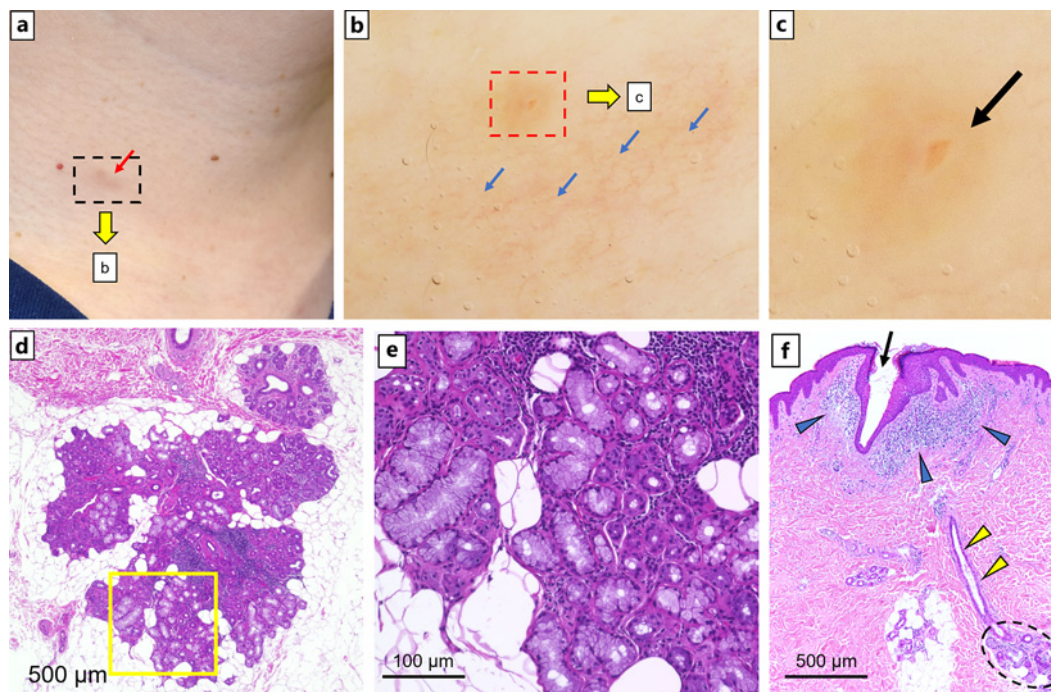


Fig. 1. Clinical and histopathological findings. **a** Gross findings. A pinkish macule is observed. The black dotted rectangle indicates the area of **(b)**. **b** Dermoscopic findings. The red dotted rectangle indicates a red dot with a pale pink halo. The blue arrows indicate telangiectasia throughout the lesion. **c** Enlarged dermoscopic image. The black arrow indicates a red dot that histologically corresponds with a fistula. **d–f** Histopathological findings. **d, e** Serous salivary glandular structures within the subcutaneous fat tissue. The yellow rectangle of **(d)** indicates the area of **(e)**. **f** A serous salivary gland (black dotted oval) with a duct (yellow arrowheads) from the dermis to the epidermis. There is a depression in the superficial layer that appears to be an orifice (black arrow). Also, there is periductal lymphocytic infiltration in the dermis (blue arrowheads).

Case Report

The patient was a 45-year-old Japanese woman with no previous history who had had a pale red macule on the right side of the neck since childhood. The lesion was characterized by repeated clear fluid discharge and erosions. At the initial examination, a pale red spot of 10 mm in diameter was observed (Fig. 1a). Dermoscopic examination showed a red dot with a pale pink halo and telangiectasia throughout the lesion (Fig. 1b, c). An excisional biopsy specimen showed mucous and serous salivary glandular structures within subcutaneous fat tissue, with a duct extending from the salivary glandular structures to the epidermis (Fig. 1d–f). There was a depression in the superficial layer that appeared to be an orifice with lymphocytic infiltration. No hair shafts were observed. Based on the clinical and histopathological findings, a diagnosis of HSGT was made. In the clinically observed area of telangiectatic, hyperplasia of capillaries and perivascular lymphocytic infiltration were seen histologically in the superficial dermis (not shown). After the excisional biopsy, there was neither fluid drainage nor the recurrence of erosions.

Discussion

HSGT has a variable clinical presentation and can appear throughout the body [1, 2]. It is generally treated surgically, but secondary tumors can develop [2]. HSGT is relatively rare, and there have been no large case series published. In a previous study of 11 cases by Haemel et al. [1], HSGT was reported to often present as “a draining sinus and/or asymptomatic nodule in the neck along the lower sternocleidomastoid muscle.” The differential diagnosis for HSGT includes branchial anomaly, which can also present as a draining sinus in the neck [3]. The dermoscopic findings are reportedly characterized by a central slit and a well-defined pale area [4]. The dermoscopic findings had been thought to correspond with branchial cysts, but no pathological images have been reported. The dermoscopic findings of branchial cysts are distinctly different from the present HSGT case. One histopathological feature of branchial anomalies is lymphocytic infiltration with germinal centers, whereas HSGT has been reported to be associated with periductal lymphocytic infiltration without germinal centers [3, 5]. In the present case, periductal lymphocytic infiltration was clearly observed (Fig. 1f). Therefore, the “red dot with a pale pink halo” corresponds with the histopathological findings of fistula and periductal lymphocytic infiltration. We think that “a red dot with a pale pink halo” is a unique dermoscopic finding of HSGT that is rarely observed in branchial anomalies. The CARE Checklist has been completed by the authors for this case report, attached as online supplementary material (for all online suppl. material, see <https://doi.org/10.1159/000535740>).

Statement of Ethics

This research complies with all ethical guidelines for human studies and animal welfare regulations. Ethical approval was not required for this study, in accordance with local guidelines. Written informed consent was obtained from the patient for publication of the details of their medical case and any accompanying images.

Conflict of Interest Statement

The authors declare that they have no conflicts of interest to disclose.

Funding Sources

No funding was received for this study.

Author Contributions

Takuya Maeda and Teruki Yanagi conceptualized and drafted the case report; Shinichiro Inoue, Yuri Nagata, and Hideyuki Ujiie revised the manuscript and supervised the research.

Data Availability Statement

All available data used in the generation of this case report are included in the article and its online supplementary material files. Further inquiries can be directed to the corresponding author.

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