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Lichen sclerosis et atrophicus masquerading as tonsillar squamous cell carcinoma

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Abstract

Objective: We report a case of a 70-year-old man of Asian origin with lichen sclerosus et atrophicus affecting the tonsil, which presented as a painful, enlarging, exophytic lesion mimicking squamous cell carcinoma.

Method: We present a case report and a review of the world literature regarding lichen sclerosus et atrophicus.

Results: Lichen sclerosus is a chronic, benign, inflammatory dermatosis of the skin and mucous membranes which mostly affects the female genitalia, presenting as white plaques with epidermal atrophy. The cause is unknown, although a number of aetiologies have been proposed. The prevalence is unknown. Women have been reported to be affected six to 10 times more than men, and the condition has no known racial preference.

Conclusion: Our patient illustrates a rare case of the condition lichen sclerosus et atrophicus; to our knowledge, this case represents the first report of tonsillar involvement of the condition. The case presented a diagnostic challenge.

Key words: Lichen Sclerosis; Tonsil; Tonsil Neoplasms

Introduction

Lichen sclerosus is a chronic, benign, inflammatory dermatosis of the skin and mucous membranes. This condition most commonly affects the female genitalia and usually presents as white plaques on the affected region.[1–3] Although the condition mainly affects genital skin and mucosa, extra-genital lichen sclerosus, and even rare oral presentations, have been reported.[1,4,5]

The condition is often described as lichen sclerosus et atrophicus in the dermatological literature, but is also known as balanitis xerotica obliterans and kraurosis vulvae in penile and vulvar presentations, respectively.[2,4]

Lichen sclerosus et atrophicus affecting only the oral mucosa is extremely rare.[1,3,5]

We describe a case of lichen sclerosus et atrophicus of the tonsil, which presented as a painful, enlarging, exophytic lesion mimicking a squamous cell carcinoma.

Case report

A 70-year-old man of Asian origin presented with a six-week history of sore throat and dysphagia. He also complained of a globus sensation. He was an ex-smoker, having ceased 28 years ago, and denied any alcohol consumption. He had significant co-morbidities, including ischaemic heart disease leading to left ventricular failure and ultimately requiring coronary artery bypass grafts, insulin-dependent diabetes mellitus, syphilis, chronic renal impairment, a permanent pacemaker, peripheral neuropathy, fistula-in-ano, and previous liver resection for hepatocellular carcinoma.

On examination, a large, exophytic lesion involving the entire right tonsil was noted, which was white in appearance and hard and very tender on palpation. Examination was otherwise normal.

The patient underwent a barium swallow procedure which showed normal mucosa and motility throughout, with no delay or obstruction. A computed tomography scan some months earlier had shown no evidence of any tonsillar or neck abnormality.

The patient underwent direct laryngoscopy, pharyngoscopy and oesophagoscopy, with biopsy of the right tonsil. Other than the abnormal tonsil, the appearances were entirely normal. The patient subsequently underwent a tonsillectomy, and made a full recovery with complete resolution of his symptoms.

Pathology results

Histological examination of the biopsy verified vacuolisation at the dermo-epidermal interface and homogenisation of the immediate sub-epidermal zone with an underlying band-like lymphocytic infiltrate, as demonstrated in Figure 1. The characteristic homogenised sub-epidermal zone and the ill-defined, vacuolised epidermal basal layer are demonstrated in Figure 2. Further typical appearances of the homogenised sub-epidermal zone and the underlying, band-like lymphocytic infiltrate are demonstrated in Figure 3.

Discussion

As previously mentioned, lichen sclerosus most commonly affects the genital skin and mucosa. Extra-genital lichen sclerosus has been reported, and sites include the lip, buccal mucosa, gingiva, palate, wrist and ankle.[1–3,5–7] However, oral presentations are generally extremely rare.

The cause of lichen sclerosus is unknown, although a number of aetiologies have been proposed.[2,6,8] These include an autoimmune-related disorder (similar to thyroiditis, vitiligo and insulin-dependent diabetes mellitus), an infectious origin, and an isomorphic phenomenon occurring in areas of friction irritation.[2,9]

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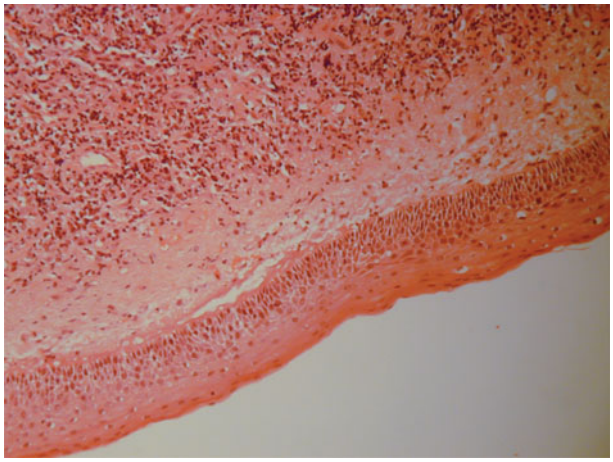

FIG. 1

Photomicrograph of biopsy, showing vacuolisation at the dermo-epidermal interface and homogenisation of the immediate sub-epidermal zone, with an underlying, band-like lymphocytic infiltrate (low power; ×10).

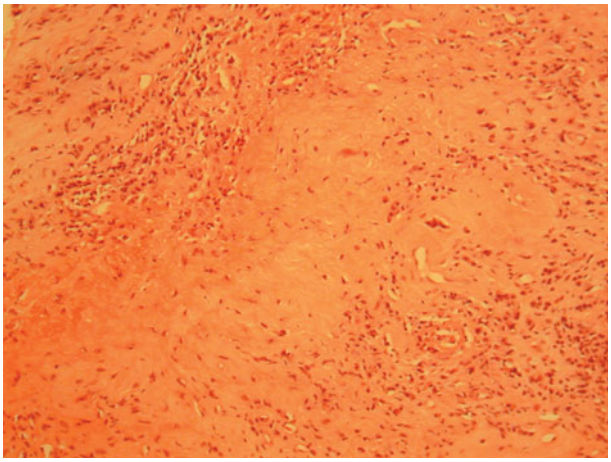

FIG. 3

Photomicrograph of biopsy, showing typical appearances of the homogenised sub-epidermal zone and the underlying, band-like lymphocytic infiltrate (high power; ×40).

The prevalence of the condition is unknown. Women have been reported to be affected six to 10 times more frequently than men, with female genital cases making up the bulk of reports.[1,2,10]

Lichen sclerosus et atrophicus of the oral cavity is extremely rare.[3] Lichen sclerosus involving the tonsil has not previously been described in the literature, to our knowledge. Our literature search identified only 10 previously reported cases of microscopically verified oral lichen sclerosus. These cases also had no associated skin or genital lesions. All were reported in Caucasians, six of whom were female and the rest male.[1–3,5,6,11–13]

Oral cases of lichen sclerosus et atrophicus, as well as many genital cases, are asymptomatic except for pruritus and cosmetic effects.[1,4] An increased risk of squamous cell carcinoma may exist in vulvar disease,[4] but lichen sclerosus et atrophicus is not in itself a premalignant condition.[2,3]

Management options range from no active treatment to the use of topical and intralesional corticosteroids, topical testosterone, and excision of the lesion.[1–3,5,6]

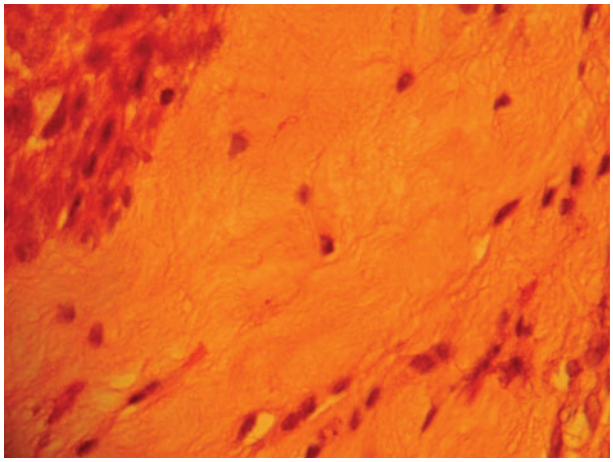

FIG. 2

Higher power photomicrograph of biopsy, showing characteristic homogenised sub-epidermal zone and ill-defined, vacuolised epidermal basal layer (high power; ×40).

The presentation of our patient differs from that of previously reported oral lichen sclerosus cases, in that our patient was male and of Asian origin; these factors, along with the patient's unique presentation, are interesting observations.

The histological features of the current case included a homogenised sub-epidermal zone and an ill-defined, vacuolised epidermal basal layer, as demonstrated in Figures 1 to 3.

Our literature review established that the prognosis of lichen sclerosus is excellent; no recurrence or development of new lesions has been reported upon follow up.[2,3,6]

Conclusion

Our patient illustrates a rare case of oral lichen sclerosus et atrophicus; to our knowledge, this case represents the first report of tonsillar involvement of the condition. It is important to remember that unusual pathology can mimic squamous cell carcinoma; in this respect, this case presented a diagnostic challenge.

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