formed as part of a diagnosis of exclusion.[7] Adnexectomy of just the affected ovary is an option in premenopausal women. The ovary to be removed is identified during surgery by measuring testosterone levels in the ovarian veins.[8]

Hyperandrogenism, particularly with signs of virilization, is very uncommon in postmenopausal women and tends to be due to tumors (mainly of ovarian or adrenal origin).[9] Other causes that should be ruled out, however, are drugs, pituitary disorders, and the ectopic production of hormones by tumors. The severity of the hyperandrogenism, the patient's age, and the speed with which signs and symptoms appear are all important diagnostic clues.

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Diagnostic Value of Color Doppler Ultrasound for Cutaneous Odontogenic Sinus Tract☆

Utilidad de la ecografía doppler color para el diagnóstico de fístulas dentocutáneas

The patient was a 32-year-old man with no past history of interest. He was seen in dermatology outpatients for a tumor in the form of a cutaneous horn sunken into the skin over the left horizontal ramus of the mandible (Fig. 1). Examination revealed no alterations of the oral cavity. The patient stated that the region was tender. He had applied topical treatment with 2% mupirocin ointment without improvement. B mode skin ultrasound (Esaote, Genoa, Italy) using an 18 MHz probe revealed a slightly tortuous, relatively well-defined, hypoechoic linear structure that extended to the surface of the cortical bone of the mandible (Fig. 2). Doppler study showed blood vessels in the area around the tract, suggestive of inflammation, and a poorly defined hypoechoic outline in B mode (Fig. 3). With a diagnosis of cutaneous odontogenic sinus, the patient was referred to the maxillofacial surgery department, where the study was completed with orthopantomography. This x-ray study revealed a radiolucent image that surrounded the apex of the posterior root of the left first molar (Fig. 4). Conservative treatment was performed with endodontia and restoration with an amalgam filling, leading to resolution of the cutaneous sinus in 20 days.

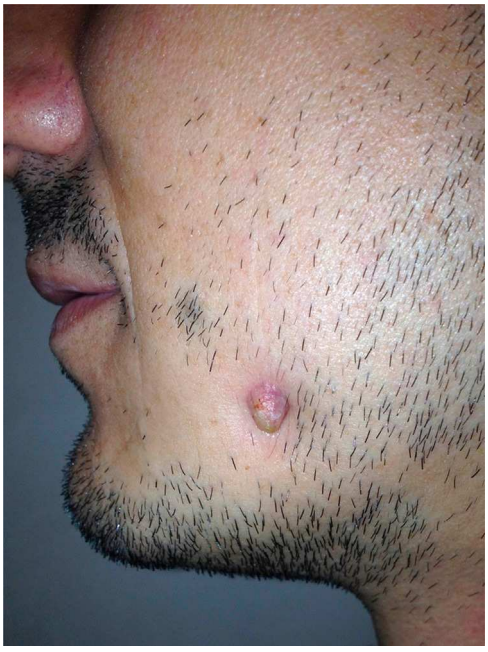

Figure 1 Cutaneous horn sunken into the skin over the left horizontal ramus of the mandible.

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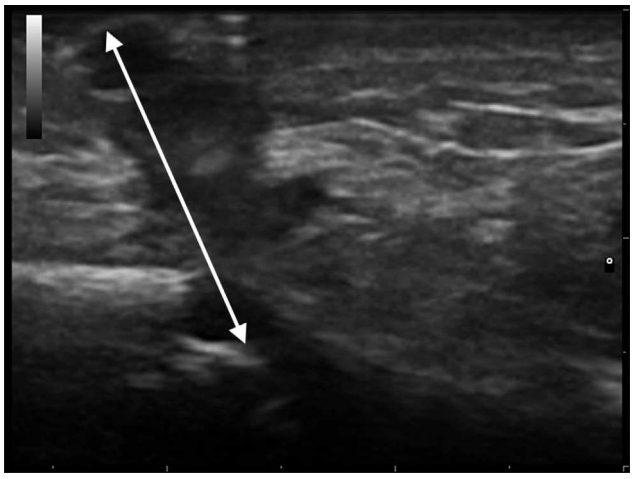

Figure 2 Skin ultrasound (gray scale, longitudinal section): relatively well-defined linear but slightly tortuous hypoechoic structure that reached the surface of the cortical bone of the mandible.

Cutaneous odontogenic sinuses are usually the result of pulp necrosis and chronic apical periodontitis. Patients do not typically relate these facial lesions with dental disease as associated pain is uncommon.[1] The lesions are often diagnosed as skin lesions, leading to the erroneous prescription of unnecessary treatments that do not resolve the problem but do delay endodontic treatment that will eliminate the dental infection and lead to closure and healing of the extraoral sinus. The diagnosis is usually made by inspection, palpation, and orthopantomography. Depending on the site of the abscess, the sinus may be intraoral or the tract may run to the skin, following the path of least resistence[2] dictated in part by muscle attachments.[3] These sinuses are more commonly associated with mandibular teeth (80%) than with maxillary teeth (20%).[4] They can also open into the nasal region, nasolabial folds, or at the medial canthus of the eye.[5,6] The cutaneous opening of the sinus has an erythematous appearance and is ulcerated in the acute phase. The perilesional skin is usually slightly depressed.[5–7] It is sometimes possible to palpate a fibrous cord that unites the site on the skin where the sinus opens with the incisor or molar that has caused the condition. Purulent material may be expressed through the cutaneous orifice when pressure is applied to the fibrous cord.[5,6]

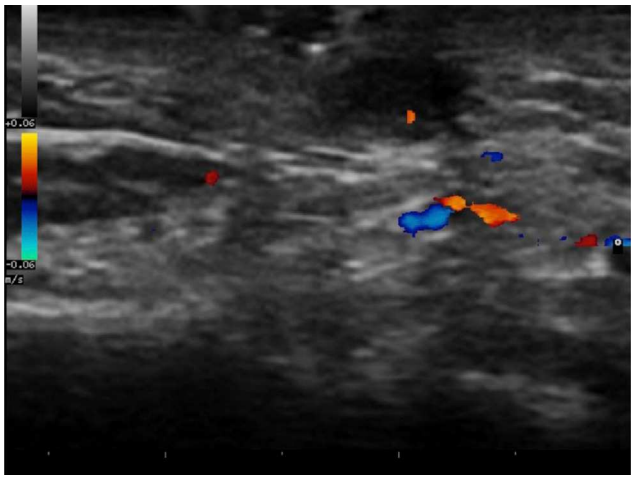

Figure 3 Doppler study showing vascularization of the area around the tract, suggesting inflammation.

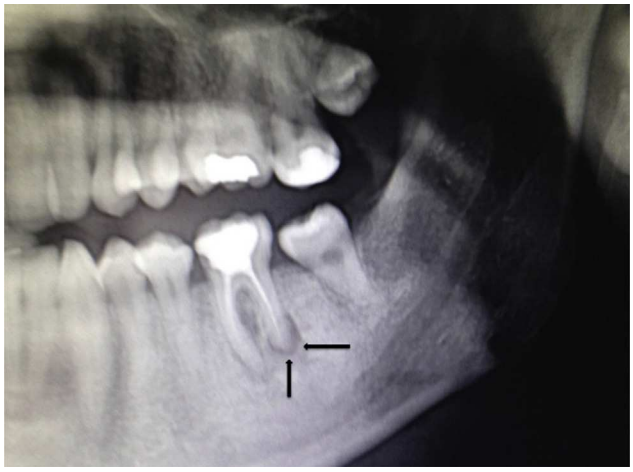

Figure 4 Orthopantomography showing a radiolucent image that surrounded the apex of the posterior root of the left first molar.

The differential diagnosis includes odontogenic cysts, foreign body reaction, salivary gland fistulas, pyogenic granuloma, tumors, and infectious diseases. Bisphosphonate-related osteonecrosis of the jaw should also be considered, particularly if there are multiple sinuses.[8]

No effective treatment has been established, although conservative management would appear to be the best approach. Aggressive debridement should be avoided due to the risk of subsequent recurrence and sequelae.[9,10]

Recently, Shobatake et al.[5] published 3 cases of cutaneous odontogenic sinuses diagnosed by ultrasound. Dermatologic ultrasound shows a well-recognized pattern with a relatively well-defined, linear but slightly tortuous, hypoechoic sinus tract that is seen to reach the surface of the cortical bone; Doppler reveals a variable degree of vascularization. Ultrasound is a tool that complements other radiologic techniques and requires little time to perform. It is an excellent option to facilitate the diagnosis of this type of lesion, even for dermatologists with little experience in the management of oral pathology. In addition, it can be used to monitor therapy and to evaluate the associated inflammation to help determine a possible indication for antibiotic prophylaxis prior to intervention.

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Tuberous Lesion of the Penis☆

Lesión tuberosa en el pene

To the Editor:

We present the case of a 48-year-old heterosexual man who presented with a tuberous lesion of 1 month's duration on the penis. His personal history was remarkable for pulmonary tuberculosis 6 years earlier and an episode of herpes zoster with trigeminal nerve involvement 3 years earlier. The only symptom reported was occasional bleeding. He was not on immunosuppressant therapy and he denied sexual risk behavior and intravenous drug use. He had no past history of sexually transmitted disease.

Physical examination revealed a pink, round, pedunculated tumor with a soft consistency located in the balanopreputial sulcus. Of note was a hyperkeratotic component on the surface of the tumor (Fig. 1). The locoregional lymph nodes were not enlarged and there were no signs of oral mucosal involvement.

The histology study showed a proliferation of atypical spindle cells with an elongated nucleus, well-defined cytoplasm, and increased mitotic activity (Fig. 2). Immunohistochemistry showed CD31 positivity and intranuclear staining for human herpesvirus 8 (HHV-8) (Fig. 3). All these findings were consistent with a diagnosis of classic Kaposi sarcoma on the penis of a middle-aged, immunocompetent patient. Additional testing included blood tests with complete blood count, biochemistry, antinuclear antibodies, tumor markers, lymphocyte counts (B cells/type 1 helper (T_H1) T cells/T_H2 cells/natural killer [NK] cells), smears, β_2-microglobulin levels, immunoglobulin counts, and viral serology tests (human immunodeficiency virus [HIV] 1, HIV-2, viral hepatitis A [VHA], VHC, VHB, HHV-6, HHV-7, HHV-8, Epstein-Barr virus, cytomegalovirus, human T-cell lymphotropic virus [HTLV] 1, HTLV-2, and varicella-zoster virus). All the results were normal, except for HHV-8 serology, which was positive. Computed tomography of the chest, abdomen, and pelvis showed no additional significant findings. The presence of an immunodeficiency disorder was ruled out in the immunology department.

The tumor was excised with disease-free margins, and the patient has not experienced any local recurrences or developed new lesions on other areas of the skin in 9 months of follow-up.

Kaposi sarcoma tumors are derived from endothelial cells. They follow a variable clinical course, ranging from minimal mucocutaneous involvement to systemic disease involving the internal organs. Disease progression varies according to the patient's origin, age, sex, and immune status. Four types of Kaposi sarcoma have been described: classic, endemic, iatrogenic, and HIV-related. Classic Kaposi sarcoma is typically more common in the Mediterranean region and Eastern Europe, and affects patients aged between 50 and 70 years. It occurs in both men and women, with reported male to female ratios ranging from 3:1 to 10:1, depending on the series. Skin lesions in classic Kaposi sarcoma are typically seen on the lower limbs, and penile involvement is very rare. Penile lesions are estimated to be the first manifestation of Kaposi sarcoma in 2% to 3% of patients with HIV infection and they are usually associated with a more aggressive course in this population.[1] By contrast, according to reports in the English-language liter-

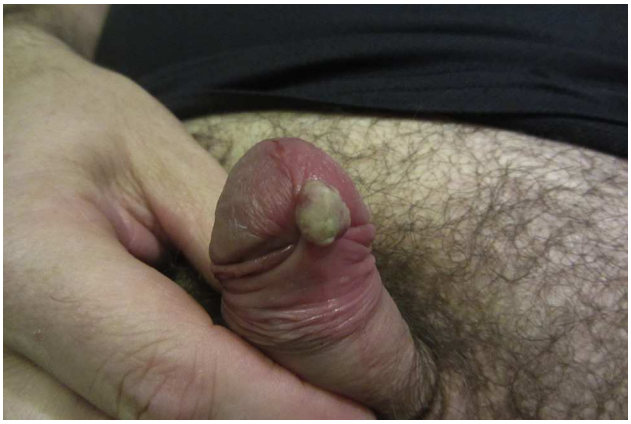

Figure 1 Pink pedunculated tumor with a keratotic surface in the balanopreputial sulcus.

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