

columnar epithelium, which showed positive immunohistochemical reaction to CK. The carcinoid component, composed of nests of uniform, chromogranin positive tumor cells, which showed up to 4 mitoses on 10 high power fields, infiltrated the whole thickness of appendiceal wall and extended to periappendiceal fat tissue. In conclusion, the incidence of neoplasms in appendectomy specimens varies from 1% to 10% according to different studies. Hence, it is important to thoroughly examine the potentially inflamed appendices, particularly when there is no sign of acute pathologic condition.

### ATYPICAL SYMPLASTIC GLOMUS TUMOR OF THE LEFT HALLUX

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Glomus tumors are benign perivascular tumors, which result from hyperplasia of normal glomus body, a specialized form of arteriovenous anastomosis that regulates heat. Occasionally, glomus tumors may exhibit some atypical histologic features and rarely can even metastasize. Here, we report a case of a symplastic glomus tumor, a variant of histologically atypical, but still benign glomus tumor. An 81-year-old male patient was surgically treated due to a tumor of his left great toe. Macroscopically, the tumor was well-circumscribed, measured 4x3x2.5 cm and was located in the subcutis. Histologically, it was encapsulated, composed of solid sheets of cells separated by vessels of a varying size. The neoplastic cells showed pronounced nuclear pleomorphism, hyperchromasia and occasional intranuclear inclusions. Mitotic rate was sparse, up to 2 mitoses on 50 high power fields, but proliferative rate measured immunohistochemically was extraordinarily high, about 25%. Tumor cells were immunohistochemically diffusely positive for SMA and desmin. According to classification of glomus tumors proposed by Folpe and coworkers, we declared this tumor as symplastic, considering marked cellular atypia, but the lack of other criteria that could point to

its possible malignant behavior. In conclusion, glomus tumors may rarely present with atypical features, but in the absence of other criteria such as large size, deep location, high mitotic index or atypical mitotic activity, they should be considered merely as a consequence of degenerative change and not a sign of malignancy.

### CLINICAL PRESENTATION OF A PATIENT WITH PALMOPLANTAR PUSTULAR PSORIASIS: CASE REPORT

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Palmoplantar pustular psoriasis is a rare, chronic dermatosis characterized by sterile pustules that develop within areas of erythema and scaling on the palms, soles or both. The minority of patients have chronic plaque psoriasis elsewhere. Focal infections and stress have been reported as triggering factors. Smoking aggravates the disease and negatively reflects on treatment success. The disorder occurs more commonly during the fourth decade of life. There is a slight female predilection. In most patients, lesions are asymptomatic; however, intermittent pruritus, and burning have been described. The histologic hallmark of palmoplantar pustular psoriasis is large accumulation of neutrophils within the stratum spinosum, known as spongiform pustule of Kogoj. Palmoplantar pustular psoriasis must be differentiated from other dermatoses, which are characterized by intraepidermal neutrophilic pustules including impetigo, superficial candidiasis, dermatophyte infection, superficial folliculitis, dyshidrotic eczema, and pustular drug eruption. Therefore, biopsy and histologic analysis is recommended in order to confirm the diagnosis. The aim of this case report is to present our patient suffering from palmoplantar pustular psoriasis, and to evaluate clinical presentation, diagnostic and therapeutic difficulties in this rare condition. A 38-year-old female patient was admitted to our hospital due to numerous sterile pustules on well-defined erythematous plaques with desquamation on the palms and soles three months before. The pustules were large (about five mm in diameter), and several stages of evolution of

pustules were present concurrently. The patient complained of occasional pruritus and burning. Chronic plaque psoriasis on elbows was confirmed seven years before, for which she received topical corticosteroids. Focal infections were not found on clinical examination. It is important to note that the patient's smoking habit aggravated the condition. Palmoplantar pustular psoriasis was diagnosed based on clinical picture and histopathologic appearance. Histopathologic analysis of skin lesion of the sole showed epidermal acanthosis with parakeratosis and large accumulation of neutrophils within the stratum spinosum, known as spongiform pustule of Kogoj. In the dermis, the capillaries were elongated and tortuous. PUVA cream phototherapy was administered five times weekly for four weeks of her hospital stay. Topical corticosteroids were applied under hydrocolloid occlusion, which significantly enhanced regression of the skin lesions. Most patients with palmoplantar pustular psoriasis have an underlying disease that can be identified, but in our case the onset, fluctuations and duration of the disease were not associated with focal infections. It is important to note that smoking aggravates the disease and has unfavorable impact on treatment success. PUVA cream phototherapy and topical corticosteroids result in dramatic improvement of the disease with significant psychosocial benefit.

#### **DETERMINATION OF EGFR, BCL-2 AND KI 67 IN PATIENTS WITH ORAL LICHEN PLANUS**

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Oral lichen planus (OLP) affects 1% to 2% of the population. Typically, it affects middle-aged and elderly women, although it can affect men, and rarely children. The cause of OLP is not known, but it is known to be mediated through T-lymphocytes to as yet unknown antigen. There is about a 1% risk of cancerous change over a 10-year period. The main problem is to identify lesions that will transform into cancer. Nor-

mally, tumor markers are used to identify cancer, but in some instances they can suggest potentially malignant lesions. Therefore, we evaluated OLP lesions using immunohistochemistry markers (epidermal growth factor receptor (EGFR), bcl-2, Ki67) in comparison to the density of subepithelial band inflammatory infiltrate. OLP patients were divided into smokers and non-smokers. There were 15 OLP patients in smoker group (age range 28-70 years) and 49 OLP patients in non-smoker group (age range 21-72 years). The mean age at OLP diagnosis was lower in OLP smokers (48.7±10.6) than in OLP non-smokers (55.8±11.5). Conventional hematoxylin and eosin staining showed no difference in the diagnosis of OLP between smoking and non-smoking group. Spearman's correlation test for EGFR expression showed no between-group difference ( $P=0.4$ ). Comparing EGFR, Ki67 and bcl-2 expression in squamous epithelium according to density of subepithelial band inflammatory infiltrate (using semi-quantitative method; low-1, medium-2, high-3), we found significant difference ( $P<0.01$ ) between smokers and non-smokers with OLP. Immunohistochemical expression of EGFR, bcl-2 and Ki67 in squamous epithelium in relation to the density of subepithelial inflammatory infiltrate showed significant difference between OLP smokers and OLP non-smokers ( $P=0.0005$ ). Study results suggested that smokers were younger than non-smokers at the time of OLP diagnosis, which may imply the possibility of cancer development at younger age than statistically reported for oral carcinoma. Additional immunohistochemical analysis revealed smokers with OLP to show a statistically significant expression of EGFR, Ki67 and bcl-2 markers in squamous epithelium in relation to the density of subepithelial band inflammatory infiltrate as compared to OLP non-smokers. These findings could contribute to understanding the carcinogenesis and pathogenesis of OLP. Additional researches in a larger sample are needed to confirm our presumption.