

## CUTANEOUS OSTEOMAS IN A SEVEN-MONTH-OLD CHILD

P. Radulović<sup>1</sup>, I. Pavić<sup>1</sup>, L. Kotrulja<sup>2</sup>, S. Ožanić-Bulić<sup>2</sup>, I. Dedio<sup>2</sup>

<sup>1</sup>Ljudevit Jurak University Department of Pathology, <sup>2</sup>University Department of Dermatovenereology, Sestre milosrdnice University Hospital Center, Zagreb, Croatia

Cutaneous osteoma (CO) is a rare entity with only scattered cases reported in the literature. Cutaneous ossifications are divided into primary and secondary CO. Secondary CO accounts for 85% of cutaneous ossifications and develops within preexisting neoplastic or inflammatory skin lesions. Primary CO accounts for about 15% of cutaneous ossifications and develops on its own. A 7-month-old child, born as second trigeminitis by cesarean section after IVF pregnancy, presented with incidental finding of multiple firm, nontender, subcutaneous pale-brownish papules scattered on the skin of the lower abdomen, arms and legs, measuring up to 7 mm. Changes were unremarkable in neonatal period. Changes became visible by the end of the fourth month of life. History specified no trauma, inflammatory changes, nevi, dermatologic or other significant medical conditions. Family history for CO or other associated diseases was negative. First punch biopsy (3 mm) obtained from the lower abdomen showed unremarkable epidermis but the dermis underneath showed well circumscribed spicules of mature lamellar bone entrapped mature adipose tissue without hematopoietic elements. Pathologist indicated CO. One month later, second 2-mm punch biopsy obtained from the left lower extremity confirmed CO indicated in first biopsy. Laboratory revealed elevated thyrotropin (TSH) up to 8.79 mIU/L (reference range: 0.4-4.0 mIU/L) and parathyroid hormone (PTH) up to 88 pg/mL (reference range: 15-65 pg/mL). Other tests regarding thyroid hormone, calcium and phosphorous levels were unremarkable. Final pathology report of CO found in biopsies suggested three possibilities: Albright's hereditary osteodystrophy (AHO), Gardner syndrome and progressive osseous heteroplasia. CO as primary form can occur *de novo* in the form of multiple miliary osteomas, widespread osteoma or plaque-like presenting as a single lesion, both found in neonatal period. All previously mentioned osteoma changes have a good prognosis. Unlike previously mentioned states with CO, AHO-

psuedohypoparathyroidism type 1a has poor long term prognosis, where besides CO it manifests with obesity, developmental disability, short stature, round face and ganglia calcification. In our case, laboratory findings supported by histology suggested the AHO syndrome, although the phenotype-associated symptoms of disease were not present yet in infancy. Further follow up is needed. The initially mild cutaneous manifestations may herald a more progressive ossification disorder, as it could be associated with multiple endocrine hormone resistance enhanced with neurobehavioral and developmental problems. Treatment of the present underlying disease is the first step. If the patient is symptomatic, surgical excision including punch excisions is currently the treatment of choice for CO.

## COMBINED CARCINOID AND LOW-GRADE MUCINOUS NEOPLASM OF APPENDIX: CASE REPORT

T. Džombeta<sup>1</sup>, C. Lež<sup>2</sup>, F. Szerda<sup>3</sup>, B. Krušlin<sup>1,4</sup>

<sup>1</sup>Department of Pathology, School of Medicine, University of Zagreb; <sup>2</sup>Department of Pathology, <sup>3</sup>Department of Surgery, Zabok General Hospital, Zabok; <sup>4</sup>Ljudevit Jurak Department of Pathology, Sestre milosrdnice University Hospital Center, Zagreb, Croatia

Mucinous tumors and carcinoids are the most common appendiceal neoplasms, but overall, they account for approximately 1% of all pathologic conditions in appendectomy specimens. They usually appear as an incidental finding in appendices removed due to suspected acute inflammation. Synchronous occurrence of these neoplasms is extremely rare and only a few cases have been reported in the literature to date. We present a case of combined low-grade appendiceal mucinous neoplasm and carcinoid in a 25-year-old female patient. The patient was admitted to the hospital due to abdominal pain. Ultrasonography showed a tumor mass near the right ovary. Diagnostic laparoscopy was performed and enlarged appendix, but no adnexal abnormalities, was found. The appendix was removed and referred for pathology. Grossly, the appendix was enlarged and filled with mucinous material. Histologically, it contained two distinct tumor areas. The mucinous component, confined to mucosa and submucosa, was composed of mucinous-type tall

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

D. Janković<sup>1</sup>, T. Džombeta<sup>2</sup>, J. Kovjanić<sup>3</sup>, B. Krušlin<sup>2,4</sup>

<sup>1</sup>Department of Pathology, Dr Ivo Pedišić General Hospital, Sisak; <sup>2</sup>Department of Pathology, School of Medicine, University of Zagreb; <sup>3</sup>Department of Surgery, Dr Ivo Pedišić General Hospital, Sisak; <sup>4</sup>Ljudevit Jurak Department of Pathology, Sestre milosrdnice University Hospital Center, Zagreb, Croatia

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

V. Bulat<sup>1</sup>, I. Borovečki<sup>1</sup>, M. Šitum<sup>1</sup>, I. Dediol<sup>1</sup>, I. Pavić<sup>2</sup>, I. Ljubičić<sup>1</sup>

<sup>1</sup>University Department of Dermatology and Venereology, <sup>2</sup>Ljudevit Jurak University Department of Pathology, Sestre milosrdnice University Hospital Center, Zagreb, Croatia

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