Pseudotumors and mimickers of malignancy of the head and neck pathology

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SUMMARY

We are summarizing some of the difficult pitfalls in tumors of the head and neck, which we have encountered in our biopsies referred for consultation as well as from our routine praxis in the last 20 years. Shortly we are presenting the following lesions of head and neck: multifocal sclerosing thyroiditis, mucoepidermoid carcinoma of the thyroid, solid cell nests, Chievitz organ, rhomboid glossitis, ectopic parathyroid, signet ring cell change of salivary glands, mucocele, epithelial misplacement of the vocal cord squamous cell epithelium, and angiomatoid nasal polyps.

Keywords: multifocal sclerosing thyroiditis – mucoepidermoid carcinoma of the thyroid –solid cell nests – Chievitz organ – rhomboid glossitis – ectopic parathyroid – signet ring cell change of salivary glands – mucocele – epithelial misplacement of the vocal cord squamous cell epithelium, angiomatoid nasal polyps

Pseudotumory a imitátory malignity v patologii hlavy a krku

SOUHRN

V naší práci chceme seznámit s některými diagnosticky nejtěžšími problémy tumorů hlavy a krku, které jsme zaznamenali v naší konzultační praxi v uplynulých 20 letech. Krátce prezentujeme tyto léze patologie hlavy a krku: multifokální sklerotizující thyroiditis, mukoepidermoidní karcinom štítné žlázy, solidní hnízda štítné žlázy, Chievitzův orgán, romboidní glossitis, ektopická příštítná tělíska, léze slinných žláz s prstenčitou přeměnou, mukokéla, epiteliální „misplacement" dlaždicového epitelu hlasivkových vazů a angiomatoidní nosní polypy.

Klíčová slova: multifokální sklerozující tyreoiditida – mukoepidermoidní karcinom štítné žlázy – Chievitzův orgán – romboidní glossitis – ektopická příštítná tělíska – léze slinných žláz s prstenčitou přeměnou – mukokéla – epiteliální „misplacement" dlaždicového epitelu hlasivkových vazů – angiomatoidní nosní polypy

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Head and neck pathology represents one of the most difficult parts of the discipline, because it encompasses many different lesions in several organs including major and minor salivary gland pathology, thyroid lesions, specific soft tissue pseudotumors and tumors, lymphomas unique to this region and others. In addition, head and neck pathology includes various embryological aberrations not occurring elsewhere in the human body. Pathologists of Plzen laboratories have been receiving for many years consultations virtually from the whole world. During the last 20 years, we collectively obtained nearly 100.000 referral cases, and head and neck lesions represent an important bulk of this collection filed in our registries.

The diagnostic problems addressed in this paper are not chosen systematically, but rather haphazardly, with emphasis on histopathological changes that may represent a serious diagnostic pitfalls to the unwary and which we consider to be the most interesting and treacherous. Thus, the aim of this article is not to present a systematic clinicopathologic overview, but to draw attention to dangerous pitfalls which can be encountered by pathologists in this difficult diagnostic field and to provide our colleagues with a knowledge that would allow them to avoid diagnostic traps. In many cases, a mere awareness of the below described lesions that are often identifiable with the use of simple hematoxylin and eosin stains is helpful.

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1. LESIONS OF MINOR SALIVARY GLANDS WITH NON-NEOPLASTIC SIGNET-RING CELLS

The term "signet-ring cells" is used to describe the round shaped cells with a crescent nucleus caused by its compression by accumulation of mucin in the cytoplasm. The nucleus is often dislodged at the periphery of the cells by the intracytoplasmic mucus. Traditionally, the signet-ring cells have been considered a hallmark of signet ring cell adenocarcinoma with a poor prognosis, most of which originate in the gastrointestinal tract, and the stomach in particular. There are, however, exceptions to this rule, and, rarely, these signet-ring cells have been described in various organs where they represented non-neoplastic lesions caused by inflammation or adjacent necrosis. Non-neoplastic signet-ring cells have been reported in the colon (1–4), salivary glands (5), cervix (6), gallbladder (2,6), gastrointestinal and biliary tract (7), prostate (8), urinary bladder (9), lymph nodes (10) and endometrium (11). In salivary glands, occurrence of epithelial non-neoplastic signet-ring cells is extremely rare (12). In contrast to metastatic signet-ring cell adenocarcinoma, in which malignant signet-ring cells grow diffusely demonstrating no relation to the preexisting structures, epithelial