

Submucosal calcifying fibrous tumor of the stomach: A case report

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SUMMARY

The calcifying fibrous tumor is a rare benign fibrous tumor which occurs in subcutaneous or deep soft tissues in children and young adults, but also is frequently seen in pleural and intraabdominal locations in older people. Gastric involvement has been only sporadically reported in the literature. We present here our experience with this unusual lesion discovered in a 68-year-old woman. Clinically, the tumor was described as a pendulating, submucosally located mass, in the body of the stomach on a lesser curvature. The calcifying fibrous tumor is a histologically distinct lesion composed of dense hyalinized collagen fibers, inconspicuous scattered fibroblasts, a varying amount of psammoma bodies or dystrophic calcifications and foci of lymphoplasmacytic infiltration. In this report we will focus on a brief review and differential diagnosis of this tumor and other more common or not widely known gastric spindle cell lesions.

Keywords: calcifying fibrous tumor – spindle cell lesion – stomach

Submukózný kalcifikujúci fibrózny tumor žalúdka – kazuistika

SÚHRN

Kalcifikujúci fibrózny tumor žalúdka je zriedkavý benígny fibrózny tumor, ktorý vzniká v podkožných alebo hlbokých mäkkých tkanivách u detí a mladých dospelých, avšak možno sa s ním stretnúť aj u starších ľudí, najmä v oblasti pleury alebo peritoneálnej dutiny. Z literatúry sú známe len ojedinelé prípady výskytu v gastrointestinálnom trakte, respektíve v žalúdku. V práci prezentujeme našu skúsenosť s touto neobvyklou léziou objavenou u 68 ročnej ženy. Klinicky bol zistený pendulujúci, submukózne uložený tumor malej kurvatury žalúdka. Histologicky je kalcifikujúci fibrózny tumor jedinečná lézia, ktorú tvoria denzné hyalinizované kolagénové vlákna, nevýrazné roztrúsené fibroblasty, rôzne množstvo psamomatózných teliesok alebo dystrofických kalcifikátov a ložiská lymfoplazmatickej infiltrácie. Naša práca je zameraná na krátky prehľad a diferenciálnu diagnostiku kalcifikujúceho fibrózneho tumoru a iných známejších alebo naopak nezvyčajných vretenobunkových lézií žalúdka.

Kľúčové slová: kalcifikujúci fibrózny tumor – vretenobunkové lézie – žalúdok

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The calcifying fibrous tumor (CFT) is a rare benign fibrous tumor which has a wide anatomical distribution. Originally thought to represent soft tissue lesions in children and young adults, it is also not infrequently seen in pleural or intraabdominal locations in older people (1-5). Gastric involvement has been only sporadically reported in the literature - tumors have been described under the serosal surface or as intrinsic visceral lesions (3-4,6-21). Clinical symptoms and imaging findings of gastric CFT are nonspecific (22). The tumor is usually found incidentally, in the form of a polyp or it can manifest with an ulceration (6-21). Final diagnosis is made by pathologist. Histologically, CFT is composed of dense hyalinized collagen fibers, inconspicuous scattered fibroblasts, a varying amount of psammoma bodies or dystrophic calcifications and foci of lymphoplasmacytic infiltration. Despite its characteristic microscopic appearance, occurrence of CFT in unusual anatomic sites, as in the gastric sub-

mucosa, it requires careful assessment and differentiation from other more common or not widely known spindle cell lesions.

CASE REPORT

We present our experience with this unusual lesion discovered in a 68-year-old woman. A CT scan of the abdomen showed a polypoid submucosally located mass lying in the junction between the gastric antrum and body along the lesser curvature of the stomach. The tumor measured 3 cm in diameter and exhibited contrast enhancement. Furthermore, gastric wall infiltration was not evident (Fig. 1).

During gastrotomy, the tumor was found to be a pendulating nodule and treatment consisted of local tumor excision together with overlying mucosa. Unfortunately, no other clinical data are available. For the histological examination we received an ellipsoid mass with smooth borders, partially covered with gastric mucosa, measuring 3.2 cm in the greatest dimension, on the cut surface whitish to grey, firm and homogenous. The whole specimen was routinely processed and stained with hematoxylin-eosin (HE). Immunohistochemistry and DNA analysis of the c-kit gene and PDGFRA gene was performed. The list of used antibodies, the source, clones and dilutions are shown in Table 1. Histologically, below an intact oxyntic gastric mucosa in the

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