BRIEF COMMUNICATION

Gastric calcifying fibrous tumour

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Intramucosal gastric tumours are most commonly found to be gastrointestinal stromal tumours or leiomyomas (smooth muscle tumours); however, a variety of other uncommon mesenchymal tumours can occur in the stomach wall. A rare benign calcifying fibrous tumour is reported and the endoscopic appearance, ultrasound findings and morphology are documented. A review of the literature found only two similar cases.

Key Words: Endoscopic ultrasound; Fibroma; Laparoscopic resection; Submucosal polyp

Calcifying fibrous tumours are rare, benign lesions characterized by hypocellular, densely hyalinized collagenization with lymphoplasmacytic infiltrations, as described by the World Health Organization (1). Psammomatous and/or dystrophic calcifications are hallmarks of these lesions. In 1988, these lesions were originally described by Case Western University (Ohio, USA) pathologists under the name of childhood fibrous tumours with psammoma bodies (2). Five years later, Fetsch et al (3) reported 10 additional cases affecting pediatric as well as young adult patients. The lesions were originally described as arising in the subcutaneous and deep soft tissues (2,3).

Recently, calcifying fibrous tumours have been reported in various locations, such as the mesentery and peritoneum (4-8), pleura (9-12), mediastinum (13), lung (14), adrenal glands (15), and paratesticular and spermatic cord (6). Although calcifying fibrous tumours have been reported in various organ systems, involvement of the gastrointestinal (GI) tract is extremely rare. To our knowledge, there are only two case reports (16,17) of this lesion involving the stomach. We describe the third case report of calcifying fibrous tumour found in the gastric wall.

CASE PRESENTATION

A 47-year-old Caucasian woman was seen by her primary care physician for a six-month history of halitosis. The patient denied the use of tobacco products but admitted to social drinking. She did not use prescribed or over-the-counter medications. She had no malaise, chest pain, palpitations, heartburn, dysphagia, weight loss, early satiety, altered bowel habits, hematemesis or melena. Past medical history included a breast lumpectomy for a fibroadenoma. Her physical examination was unremarkable.

A barium examination of her upper GI tract revealed a round defect impinging on the lumen, which was suggestive of a gastric polyp at the junction of the distal lesser curvature and antrum. Gastroscopy revealed a 2 cm × 2 cm distal lesser curvature bulge with normal overlying mucosa (Figure 1). Mucosal biopsies showed chronic gastritis

Les tumeurs gastriques intramurales sont surtout des tumeurs stromales gastro-intestinales ou des léiomyomes (des tumeurs des muscles lisses). Cependant, toute une série d’autres tumeurs mésenchymateuses rares peuvent se manifester sur la paroi de l’estomac. Une tumeur fibreuse calcifiante rare et bénigne est déclarée, et son apparence endoscopique, les constatations échographiques et sa morphologie sont documentées. Une analyse bibliographique n’a permis de découvrir que deux cas similaires.

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and S100 stainings were negative. The histology was characteristic of a benign, calcifying, fibrous tumour.

**DISCUSSION**

Submucosal lesions are usually asymptomatic and detected incidentally on endoscopic or radiological examinations performed for unrelated indications. A retrospective study (18) suggested that the incidence of gastric submucosal lesions is 0.36%. GI stromal tumours (GISTs), the most common nonepithelial tumours of the alimentary tract, originate from interstitial cells of Cajal (19,20). Most GISTs are immunohistochemically positive for CD117 (c-kit protein) and approximately 70% test positive for CD34 (20). Other mesenchymal neoplasms include smooth muscle tumours (leiomyomas and leiomyosarcomas) which are positive for the smooth muscle markers desmin and actin, schwannomas derived from nerves which are positive for S100, and vascular tumours derived from endothelial cells. Heterotopic pancreas, lipomas, cystic lesions and lymphomas comprise the rest of the gastric submucosal lesions (20).

The pathology in this case was unique and showed a parvicular, spindle-celled tumour with a dense hyaline stroma that exhibited a negative immunoprofile for GISTs of smooth muscle and neural derivations. A calcifying fibrous tumour is a rare, benign, soft tissue tumour of fibrocytic derivation that has been reported in many body sites and appears to be more viscerotropic in older patients. To the best of our knowledge, only two similar cases (16,17) have been reported in the stomach. The presence of intratumoural calcification, in the absence of degenerative changes, may be a clue for diagnosis through endoscopic ultrasonography, which was evident in our case. Although the pathogenesis of this tumour remains unknown, trauma has been implicated. Reported soft tissue tumours of this type have a benign prognosis. Although rare, calcifying fibrous tumours must be included in the lengthy differential diagnosis of a gastric mesenchymal tumour.
REFERENCES
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