BRUNNEROMA - A RARE TUMOUR OF THE DUODENUM (A Case Report)

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Introduction

Tumours of the Brunner's gland (Brunneroma) are uncommon tumours of the duodenum. They are, probably, not true neoplasms but hyperplasias or hamartomas [1] and may represent a protective phenomenon against gastric hypersecretion [2]. Increased incidence has been described in uraemic patients [3]. They may not be diagnosed by routine endoscopic biopsies because of the submucosal locations and histological similarity to normal Brunner's glands [4]. We present here a case of Brunneroma which we encountered recently.

Case Report

A 28-year-old male reported to the gastroenterology clinic in January 1994 with history of bleeding per rectum and melaena progressively increasing for the past 4 months. He had no other symptoms. All routine haematological and biochemical investigations were within normal limits. Endoscopy revealed a polypoid mass at the junction of 1st and 2nd part of the duodenum. Polypectomy was performed and the specimen, on gross-examination, was a solid, sessile, globular mass measuring 4 x 2 x 1.5 cm. Cut section was unremarkable. Microscopy revealed normal intestinal epithelium with underlying serous gland (Fig 1). The main bulk of the tumour tissue was formed by serous glands lined by cuboidal cells with clear watery cytoplasm. The acini were separated by fibromuscular septae. Focal areas of lymphomonocuclear inflammatory cell infiltrates were also seen. He was diagnosed as a case of Brunneroma.

Discussion

Tumours of duodenal glands were thought to be rare till adenomas were recognized [5]. The exact incidence of Brunneroma is not known [3]. The

lesions are most frequently located in the superior and descending part of the duodenum [6] as it was in the present case. The lesion may be located near a duodenal ulcer or area of duodenitis. It usually presents with haemorrhage, obstruction or diarrhoea and runs a benign course. The lesion may be single or multiple sessile or pedunculated polyps. Three morphological types of lesions occur, namely, diffuse nodular hyperplasia, circumscribed nodular hyperplasia, and adenomatous hyperplasia characterized by polypoid masses protruding into the duodenal lumen [6].

Histologically, all lesions are composed of lobules of normal Brunner's glands surrounded by bands of smooth muscle originating from the muscularis mucosae. Focal lymphocytic infiltration may be present as was seen in the present case.

Fig. 1 : Shows normal intestinal epithelium with underlying Brunner's glands (40 X)

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The tissue may contain Paneth cells which are not seen in the normal state which was the case in our patient. Some glands may be show cystic dilatation and may give rise to mucocoeles mimicking a tumour.

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