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Prikaz slučaja /
Case report

GASTRIC POLYP AS A RESULT OF PANCREATIC ECTOPY – *A Case Report*

POLIP ŽELUCA KAO POSLEDICA EKTOPIJE PANKREASA – *Prikaz slučaja*

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Key words

pancreas; heterotopia; stomach.

Ključne reči

pankreas; heterotopija; želudac.

Abstract

Background: Pancreatic heterotopia is a relatively rare congenital anomaly that can be found in all ages. Even though it does not have connection with normal pancreatic tissue, similar pathological changes in regular and ectopic pancreatic tissue can be diagnosed. **Case report**: We report a case of a 9-year-old boy with a histopathological diagnosis of ectopic pancreatic tissue in antral region of the stomach. This diagnosis was supported by lobular architecture of pancreatic tissue that contained pancreatic acini, ducts and islets of Langerhans. **Conclusion:** Pancreatic heterotopia is a condition of uncertain origin and challenging diagnosis so histopathological examination is necessary in order to give a correct diagnosis.

INTRODUCTION

Heterotopic pancreas represents a congenital anomaly defined as pancreatic tissue found outside normal anatomical position of pancreas [(1)]. It is a relatively rare entity being discovered incidentally in most cases. Ectopic pancreatic tissue does not have anatomical or vascular connection with pancreatic body [(2,3)]. It is usually asymptomatic, but depending on localization, the existence of ectopic tissue could be complicated by inflammation, obstruction, bleeding or malignant transformation [(3,4,5)]. Heterotopic pancreatic tissue is usually found in patients who underwent gastroduodenoscopy or surgery for other medical reasons [(2,3)]. We report a case of a 9-year-old boy with an ectopic pancreatic lesion in the antrum of stomach.

CASE REPORT

A preoperative diagnosis of gastric polyp in a 9-year-old boy who underwent gastroduodenoscopy and surgical resection was determined. All visible lesion was removed and the excised specimen was sent for histopathological examination and definite diagnosis. On gross examination, the material corresponded to the lobular, white nodules with interspersed yellowish areas, measured 2.5x2x1cm, firm to fleshy and soft consistency. Careful serial sectioning showed homogenous appearance. After fixation in formaldehyde, grossly described nodules with surrounding gastric tissue were processed for microscopic examination as 2 tissue specimens and 4 histological sections, stained with hematoxylin and eosin (H&E) and Giemsa. Histopathological examination of the lesion revealed lobular architecture of heterotopic pancreatic tissue in the gastric antrum. The pancreatic lobules were located mainly in the gastric submucosa with the normal overlying gastric mucosa (Figure 1). The lobules contained pancreatic acini, ducts and islets of Langerhans (Figure 2). Based on the histopathological finding, the definite diagnosis of heterotopic pancreatic tissue was given.

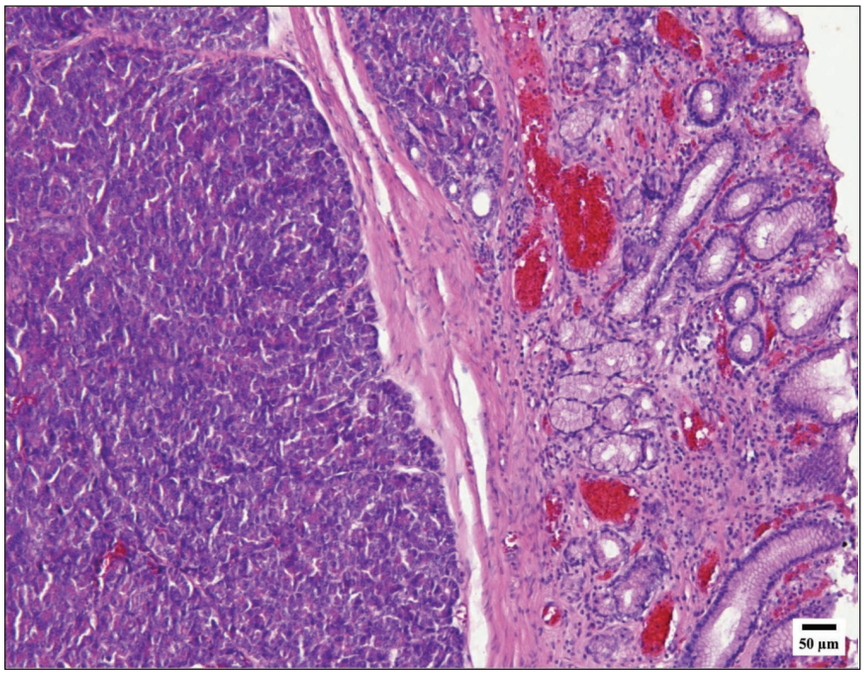

Figure 1: *Nodulary shaped ectopic pancreatic tissue located in the submucosa and focally in the lamina propria of gastric mucosa; H&E, x10.*

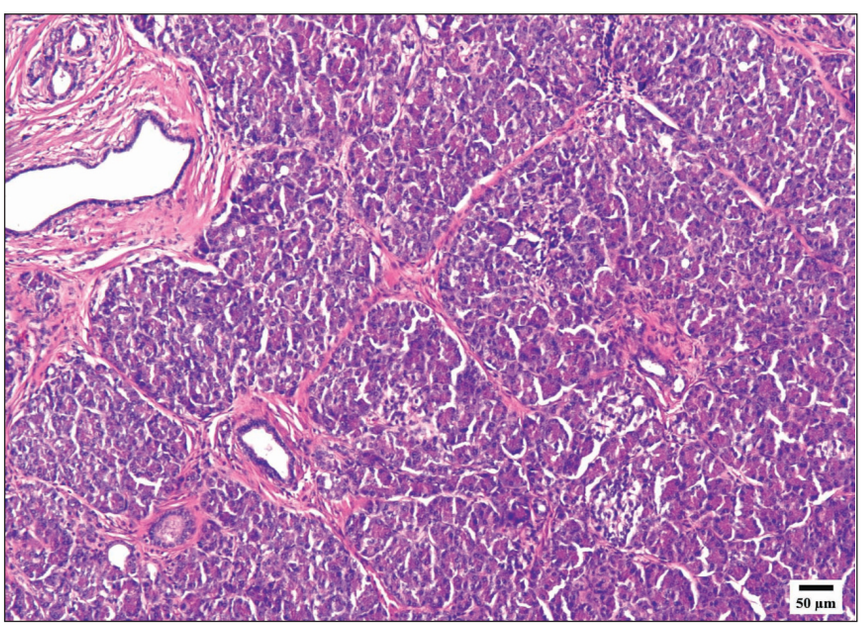

Figure 2: *Ectopic tissue of pancreas having typical histological organization and containing pancreatic acini, ducts and islets of Langerhans; H&E, x10.*

DISCUSSION

Heterotopic pancreatic tissue is relatively uncommon lesion found in all ages. The origin of pancreatic heterotopia is uncertain and it is believed that this heterotopia occurs during foregut rotation, when pancreatic tissue fragments separate from the main body of pancreas and deposit in ectopic sites [5,6]. Previous studies reported that pancreatic ectopy is most commonly located in gastric antrum, but also at numerous sites of abdomen and thorax [1,3]. Depending on the localization of ectopic tissue, various symptoms can occur in these patients. It can occasionally be presented with nausea, vomiting and abdominal pain due to endocrine and exocrine function of heterotopic pancreatic tissue that secretes enzymes and hormones related to chemical irritation and inflammation [6,7]. Peptic ulceration and upper gastrointestinal bleeding, as well as pancreatitis, pseudocystic or malignant degeneration are more dangerous presentations that are difficult to handle [4,5,7,8,9]. There is no specific

examination and diagnostic method for this condition and the diagnosis depends on postoperative examination of surgical specimen. CT has a little diagnostic value and endoscopy is often inconclusive [7,9]. Differential diagnosis could be challenging, as this lesion shows strong clinical resemblance to gastrointestinal stromal tumors (GIST), leiomyoma, polyps, peptic ulcer, primary gastric malignancy or even metastatic disease [2,3,8,10]. Therefore, the most helpful method for differential diagnosis are frozen sections to establish the diagnosis intraoperatively. This method should be taken routinely so radical surgery such as Billroth's procedure or subtotal gastrectomy can be avoided [2,3,5]. The procedure that is shown to be adequate and safe for the treatment is limited surgical resection [1,7]. Ectopic pancreatic tissue presented as small polyp can be removed by endoscopic excision [2]. Open surgery or endoscopy are necessary if symptoms occur [3]. The postoperative results are satisfactory if this condition isn't complicated by other presentations.

CONCLUSION

Pancreatic heterotopia is not very common condition but it should be included in differential diagnosis of gastric lesions. The diagnosis itself remains challenging and histopathological examination is mandatory so pancreatic heterotopia could be distinguished from other lesions. After surgical excision, symptomatic relief is assured.

Sažetak:

Uvod: Pankreatična heterotopija je relativno retka kongrenitalna anomalija koja se može javiti u svim starosnim grupama. Iako nema anatomsku ili vaskularnu povezanost sa normalnim tkivom pankreasa, patološke promene u normalnom i ektopičom tkivu pankreasa mogu biti skoro u potpunosti iste u zavisnosti od toga koja je komponenta prisutna. **Prikaz slučaja:** U ovom članku je prikazan slučaj devetogodišnjeg dečaka sa histopatološkom dijagnozom ektopičnog pankreatičnog tkiva u antrumu želuca. Dijagnoza je postavljena na osnovu histološke slike koja podrazumeva lobularnu arhitektoniku pankreatičnog tkiva koje sadrži pankreatične acinuse, kanaliće i Langerhansova ostrvca. **Zaključak**: Pankreatična heterotopija je stanje čije se poreklo objašnjava brojnim teorijama, i dijagnoza ovog stanja može predstavljati izazov, te je histopatološka potvrda neophodna za postavljanje pravilne dijagnoze i indikovanja daljeg lečenja, ukoliko je potrebno.

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