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Mucinous cystadenocarcinoma of the pancreas: an uncommon presentation with anaemia and upper gastrointestinal bleeding

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Keywords: mucinous cystadenocarcinoma; pancreatic cysts; gastrointestinal bleeding

Cystic neoplasms of the pancreas are uncommon, accounting for approximately 1% of all pancreatic neoplasms and 1 to 15% of all pancreatic cysts[1,2]. They are seen mostly in middle aged women and about 500 cases have been reported in the English literature[3]. A case of mucinous cystadenocarcinoma presenting with upper gastrointestinal bleeding is presented below with a brief review of the literature.

Case report

A 27-year-old woman presented to our gastroenterology department with an 8-month history of malaise, fatigue and intermittent production of black and soft stools. She had been diagnosed as having iron deficiency anaemia and treated with iron-containing pills before admission.

On examination, she was pale and overweight. There was 2 cm diffuse hepatomegaly and 6 cm splenomegaly, and a barely palpable epigastric mass.

Her laboratory examination revealed anaemia (haemoglobin: 6.9 g/dl, Haematocrit: 22%, hypochromia, poikilocytosis on smear), and mild hypoproteinaemia (total protein: 5.7 g/dl, albumin: 2.97 g/dl). All other parameters and haemoglobin electrophoresis were normal.

Her gastroscopy revealed an ulcerovegetating, 3×3.5 cm mass on the posterior fundic area and multiple biopsies failed to prove malignancy.

Ultrasonography and computerized tomography examination revealed a 10×10 cm multiloculated cystic mass in the tail of the pancreas, a 2 cm cortical cyst in the left kidney, cholelithiasis and a left ovarian cyst 2 cm in size.

Her laparotomy revealed a 10×10 cm cystic tumour in the tail of the pancreas which was in direct continuation with the posterior surface of the stomach. The pancreatic cystic tumour was found to contain mucinous fluid, and so mucinous cystic neoplasm was diagnosed. Partial fundus resection, splenectomy and cholecystectomy was performed. Histological examination report was mucinous cystic tumour with atypical epithelium. Distal pancreatectomy was performed one month later which enabled total excision of the tumour with no residue and the patient was discharged with no morbidity. Histological examination was then able to show foci of adenocarcinoma (Figure 1).

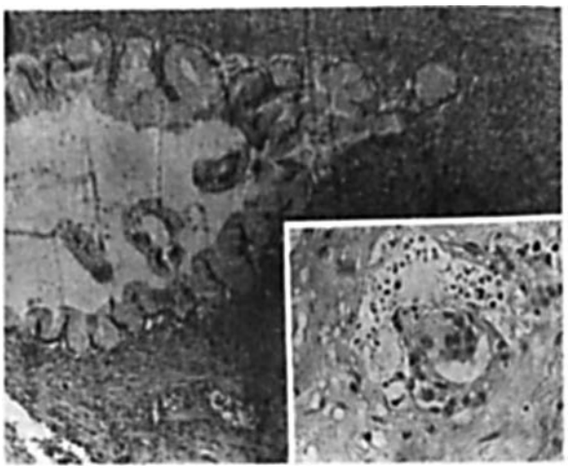

Figure 1. The histology of the tumour (H & E ×100). The inset shows focus of stromal invasion (×400)

The patient is well and disease free 20 months after the second operation evidenced by ultrasonography and tomography.

Discussion

Cystic neoplasms of the pancreas are rare and they are seen mostly in women aged between 40 and 60 years[4]. They are believed to arise from the larger pancreatic ducts, and Compagno and Certel[4] classified these neoplasms in 1978 into glycogen-rich microcystic adenomas (serous adenoma) and mucinous cystic neoplasms, the latter indicating an overt and latent malignancy.

The most common presenting signs and symptoms for cystic neoplasms of the pancreas are abdominal fullness, mass and pain. Jaundice is infrequent. Presentation with upper gastrointestinal bleeding and anaemia has been rarely reported due to the avascular nature of the tumour[4]. Some cases have diabetes mellitus and constitutional abnormalities and other tumours are reported in the literature. Cholelithiasis is reported to be observed in 20-25% of cases[1,3].

The most important steps in diagnosis are ultrasonography and computerized tomography. The differential diagnosis includes other cysts of the pancreas, namely pseudocysts, retention and congenital cysts.

Mucinous cystic neoplasms are all believed to have the potential to become malignant, and total excision is generally agreed to be the treatment of choice.

The size of mucinous cystic neoplasms is also reported to correlate with the degree of malignancy potential. Tumours up to 3 cm in size are usually considered benign, and over 8 cm are usually malignant. Tumours of 5 cm diameter are considered to be borderline lesions and should be treated as malignant.

The prognosis of mucinous cystic neoplasms are better than the exocrine adenocarcinomas, 5-year survival reported to be about 68% in totally resected cases[2].

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Mucinous cystadenocarcinomas are not reported to benefit from chemotherapy and/or radiotherapy[2]. Total excision provides a long-term survival in the majority of patients.

In summary, all mucinous cystic neoplasms of the pancreas should be regarded as malignant and total excision must be employed whenever possible with the hope for cure in patients without distant metastasis.

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Detached iris cyst presenting as an intraocular foreign body

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Keywords: iris cyst; pseudomelanoma; intraocular foreign body

Iris cysts, which are uncommon, can present diagnostic difficulties. An iris cyst is most commonly misdiagnosed as an iris melanoma, which has led to the inappropriate enucleation of a number of eyes[1]. We present a case of an iris cyst which detached to lie in the inferior iridocorneal angle of the eye, and was initially misdiagnosed as an intraocular foreign body. Recognition of the condition is important in order to avoid unnecessary surgery.

Case history

A 26-year-old man presented to another unit with a superficial corneal foreign body, and associated rust ring. He had been hammering rusty metal at the time of injury. He gave a history of a number of previous corneal foreign bodies, requiring removal in hospital. The foreign body was removed and an eye pad applied together with chloramphenicol ointment. He was asked to return the following day for removal of the rust ring, at which time further examination revealed a small particle lying in the inferior iridocorneal angle of the eye. A presumptive diagnosis of intraocular foreign body was made and plain X-rays of the orbit were taken. Unfortunately these were of poor quality and further views were planned. At this point the patient, fearing a long period of hospitalization, requested that he be transferred to a unit closer to his own home. He presented to our hospital the following day, where repeat X-rays failed to demonstrate any radioopaque foreign body. The corneal ulceration had by this time healed, and, though there were several faint superficial scars representing old injury, there was no sign of any previous full thickness penetration. The anterior chamber was completely quiet, and the iris normal; in particular it demonstrated no transillumination defects of the pigment epithelium. Visual acuity was normal (6/5) and fundoscopy unremarkable. He gave no history of prior topical miotic therapy. A small darkly pigmented particle measuring 0.5 mm in diameter was noted in the inferior iridocorneal angle (Figure 1), which floated freely in the anterior chamber on movement of the globe (Figure 2). A diagnosis of detached iris pigment cyst was made.

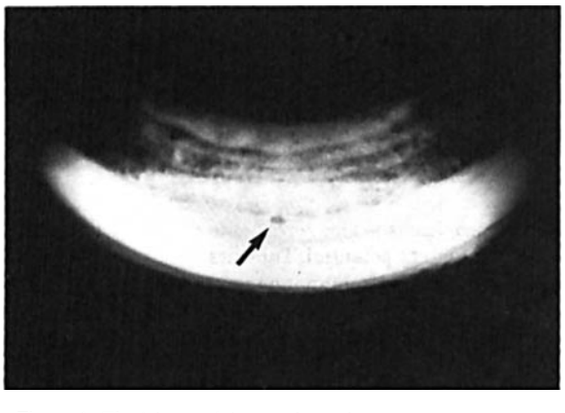

Figure 1. The iris cyst lying in the iridocorneal angle

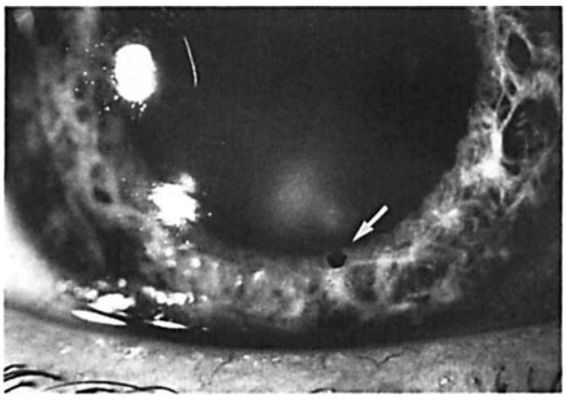

Figure 2. The iris cyst floating in the anterior chamber following movement of the globe

Discussion

Intraocular foreign body is a serious, sight threatening condition, and incidents of missed diagnosis are all too frequent. The effects are often not apparent until some years later, when the retino-toxic effects of retained metal become manifest, by which time they are irreversible.

A common scenario is the diagnosis of an intraocular foreign body some time after the injury, when the patient presents with a new corneal foreign body. At this time the eye is usually quiet, and may well not show the typical features of metallosis[2]. A high index of suspicion is therefore required.

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