PANCREAS

MAIN CATALOGUE

CASE 13751
A man aged 61, while visiting Adelaide from Sydney, collapsed and died suddenly. Post-mortem found an aortic dissection that had ruptured into the pericardium. There were solitary cysts 3cm in diameter at the upper pole of each kidney. There were no cysts in the liver.
The specimen consists of the greater portion of the pancreas sectioned longitudinally. About the mid-portion of the organ is a well-demarcated cystic tumour measuring about 7x3cm. The cut surface shows many cystic spaces, mainly small, but the largest measures 3cm in diameter.
Diagnosis and comment: In the absence of any obvious mucin in the lesion, this probably represents a serous cystadenoma (microcystic cystadenoma). Histological assessment is necessary for confirmation. Cysts may also occur in the pancreas in a variety of situations including patients with adult polycystic kidney disease and in mucinous neoplasms that may be benign, borderline or malignant.

CASE 15983
A man aged 37 became breathless which led to x-ray and thoracotomy for a left upper lobe neoplasm. Biopsy suggested a seminoma. Because the lesion was inoperable it was irradiated and he returned to work. Twelve months later he became jaundiced and the liver was irradiated over a period of 4 months. He was admitted with ascites and multiple spider naevi were noted on the chest and abdomen. Liver function tests were normal. Continuous abdominal paracentesis was performed but he became more jaundiced and died 3 weeks later.
The specimen consists of the pancreas cut longitudinally together with the duodenum. In the head of the pancreas is an ill-defined, infiltrating mass measuring 6cm in maximum dimension that has destroyed the lobular architecture of the pancreas and has invaded through the muscularis externa of the duodenum into submucosa and mucosa leading to ulceration in the second part. The main pancreatic duct is not obviously dilated. Seen through the bottom of the specimen is an enlarged pale lymph node and the common bile duct that does not appear dilated.
Diagnosis: Carcinoma of the head of the pancreas
Comment: At post-mortem there were metastases in the para-aortic and lesser omental nodes, and several metastases in the lungs. The primary tumour was considered to be this one in the head of the pancreas.

CASE 16313
A man aged 67 was admitted to hospital with obstructive jaundice of 5 weeks duration fluctuating in intensity. The liver was enlarged 4 fingers. Chest x-ray showed many lung metastases. He died after 2 weeks.
The specimen consists of the head of the pancreas, the duodenum, a slice of liver and the gallbladder. A large 6cm diameter fungating tumour arises from the region of the ampulla of Vater and projects into the second part of the duodenum. There is extensive infiltration of the liver by pale secondary deposits. The gallbladder is dilated and contains a pale oval cholesterol stone.
Diagnosis: Carcinoma of the ampulla of Vater

CASE 16535
A woman of 78 had intermittent colicky central abdominal pain for 3 months. There was anorexia but bowel habits were normal. At her final admission there was severe central colicky abdominal pain with vomiting. She was febrile and very tender in the right iliac fossa. She was thought to have acute appendicitis and operation was performed. The appendix was normal. It was removed, but post-operatively she remained hypotensive and died the next day.
The specimen consists of the pancreas sectioned longitudinally, the gastric antrum and pylorus and the duodenum. In the head of the pancreas is a 6cm diameter pale fibrous infiltrating mass with ill-defined margins. It invades into duodenal wall but there is no obvious narrowing of the duodenum. The common bile duct is not apparent.
Diagnosis: Carcinoma of the head of the pancreas

Comment: Post-mortem showed ischaemic heart disease, nephrosclerosis and evidence of congestive cardiac failure. There were metastases in the porta hepatis and in the liver. As the tumour does not appear to significantly narrow the duodenum it may not have been the cause of her colicky abdominal pain.

CASE 17105

The patient was a man aged 63 with a past history of myocardial infarction. He was known to be a moderate smoker and a heavy drinker. On the day of admission he developed severe retrosternal and epigastric pain followed by vomiting and sweating. He was initially diagnosed as having another myocardial infarction but later pancreatitis was suggested as he had developed generalised abdominal tenderness, paralytic ileus and jaundice. He died 4 days after admission.

The specimen consists of the pancreas that has been sectioned longitudinally. Within the pancreas, lobules are outlined by areas of pale fat necrosis and there is extensive haemorrhage and fat necrosis in adipose tissue surrounding the pancreas.

Diagnosis: Acute haemorrhagic pancreatitis

CASE 18416

The patient was a woman aged 81 who lived alone and was found dead in her bedroom. Post-mortem showed extensive fresh myocardial infarction with rupture into the pericardium. There was a large adenoma in the right lobe of the thyroid.

The specimen consists of the pancreas cut longitudinally and the duodenum. In the head of the pancreas is a well-demarcated cystic tumour measuring 6cm in diameter. The tumour comprises numerous cysts, many small but varying in size up to 3cm in diameter.

Diagnosis and comment: In the absence of any obvious mucin in the lesion, this probably represents a serous cystadenoma (microcystic cystadenoma). Histological assessment is necessary for confirmation. Cysts may also occur in the pancreas in a variety of situations including patients with adult polycystic kidney disease and in mucinous neoplasms that may be benign, borderline or malignant.

CASE 18569

The patient was a woman aged 85 who had had episodes of abdominal pain for one month. Abdominal examination was inconclusive. She died 2 days after admission. Post-mortem showed an aortic dissection extending from the level of the left subclavian artery to the diaphragm and which had ruptured into the left pleural cavity. Lymph nodes showed sarcoidosis and there were sarcoid infiltrations in the pleura of both lungs.

The specimen consists of the pancreas cut longitudinally and duodenum. There are numerous cysts measuring up to 3cm in dimension scattered diffusely throughout the pancreas. Some are multilocular. Much of the pancreas is replaced by cystic cavities of varying sizes up to 3cm.

Diagnosis: Multiple benign cysts of the pancreas

Comment: Histology reportedly showed enlarged ducts of varying size, with surrounding fibrosis but little evidence of inflammation. The cause of these cysts is unclear. Cysts in the kidney suggesting adult polycystic kidney disease are not mentioned, nor are granulomas suggestive of sarcoidosis in the pancreas. The cysts could be congenital.

CASE 18850

The patient was a woman aged 67 who suddenly developed severe right-sided upper abdominal pain transmitted to the right shoulder. There was no history of bowel disturbance or previous jaundice. On admission the BP was 180/100, she was fibrillating and the JVP was raised. After an initial temporary improvement severe abdominal pain recurred the next day, associated with shock. Serum amylase was 1500 on the first day and 3000 on the 2nd day. Laparotomy was refused. On the evening of the 2nd day aspiration of vomitus required bronchoscopy. She died on the morning of the 3rd day.

The specimen consists of the pancreas sectioned longitudinally with part of the duodenum. The pancreas and surrounding adipose tissue shows patchy haemorrhage and scattered pale foci of fat necrosis. There is a large antemortem thrombus in the root of the superior mesenteric vein as it traverses the head of the pancreas.
Diagnosis: Acute haemorrhagic pancreatitis

CASE 18880
The patient was a man aged 73 who suffered from a sudden onset of left-sided abdominal pain that radiated through to his back. This was associated with vomiting. On examination he had tenderness with guarding in the epigastrium. He later developed glycosuria, became profoundly shocked and died 4 days later.
The specimen consists of a longitudinal section of pancreas together with a section of spleen and a portion of greater omentum. The pancreas is markedly haemorrhagic and necrotic with the lobular architecture being effaced. There are many scattered pale areas of fat necrosis in the pancreas, surrounding retroperitoneal fat and omental tissue. The spleen is somewhat enlarged. Probable antemortem thrombus is present in the splenic vein near its hilum.
Diagnosis: Acute haemorrhagic pancreatitis
Comment: At post-mortem four small calculi were found lodged in and obstructing the ampulla of Vater.

CASE 19373
An alcoholic man aged 60 fell out of his car and broke his arm. He was discovered 3 hours later. On examination he was jaundiced with an enlarged liver. Open reduction of the fractured surgical neck of the humerus was performed next day. On the 2nd day he was restless and febrile and he died on the 4th day.
The specimen consists of a portion of the pancreas. It appears fibrous and the pancreatic duct is dilated and contains irregular white calculi.
Diagnosis: Pancreatic calculi with fibrosis
Comment: Histology showed fibrotic replacement of acinar cells and irregular islets.

CASE 19540
A man aged 83 had recurrent abdominal pain after meals, located to the left of the umbilicus moving across to the right, made worse by fatty foods and often succeeded by vomiting. He used to be a heavy drinker but was now moderate. Barium meal showed a hiatus hernia. He had mild diabetes controlled with chlorpropamide. He was finally admitted with a hemiplegia, developed pneumonia and died.
The specimen consists of the pancreas sectioned longitudinally. The gland appears small and there is some loss of lobular architecture suggesting fibrosis, particularly in the head and tail.
Diagnosis: Pancreatic fibrosis in keeping with chronic pancreatitis
Comment: This was confirmed by histology.

CASE 22285
The patient was a diabetic woman aged 76 who was admitted with a 2-weeks history of diarrhoea, vomiting and abdominal pain. Blood sugar was elevated. She died after 2 weeks.
The specimen consists of the pancreas sectioned longitudinally. Small pale areas of fat necrosis are scattered through the adipose tissue within the pancreas, particularly in the head.
Diagnosis: Acute pancreatitis

CASE 22432
This 79-year old woman presented with general malaise for 3 weeks. She had had a dull pain in the left renal angle radiating to the back and shoulders during the last 2 weeks associated with nausea and vomiting. On examination she had an enlarged nodular liver and her right leg was swollen. Her condition gradually deteriorated until she died.
The specimen consists of pancreas and spleen and on either side the saphenous, femoral and external iliac veins. The coronal slice through the pancreas and spleen shows an ill-defined irregular pale 4cm diameter mass in the tail of the pancreas that invades the adjacent spleen. The veins show antemortem thrombus in both common femoral and both internal saphenous veins. In the left-hand specimen the thrombus also involves the external iliac vein.
Diagnosis: Carcinoma of the tail of the pancreas invading into spleen with thrombosis of the external iliac, femoral and saphenous veins

CASE 22790
The patient was a woman aged 69 who was admitted for investigation of low thoracic back pain that had been present for 3 months. On examination there was tenderness over the lower thoracic and upper lumbar vertebral spines and x-ray showed partial collapse of the body of T11. One week after admission there was a sudden onset of total paraplegia and she died 4 days later.
The specimen is a longitudinal section of pancreas with adjacent duodenum, spleen and splenic flexure of the colon, the latter appearing pigmented, probably from melanosis coli. Within the tail of the pancreas is a pale, irregular, 4cm diameter tumour that contains numerous tiny cysts and demonstrates small foci of haemorrhage. It invades into adjacent adipose tissue. The spleen appears normal.
Diagnosis: Carcinoma of the tail of the pancreas
What relationship may the collapse of T11 and the paraplegia have to this lesion? They could have been caused by vertebral metastases.

CASE 23087
The patient was a man aged 82 who had suffered painless jaundice for one month, with clay-coloured stools and bile and urobilinogen in the urine. On admission to hospital he was still deeply jaundiced with general abdominal tenderness maximal in the left hypochondrium. A provisional diagnosis of terminal carcinoma of the biliary tree was made and he died 3 days after admission.
The specimen consists of the pyloric end of the stomach, the first and second parts of the duodenum and the pancreas. A large red calculus can be seen impacted in the ampulla of Vater and protruding into the duodenum. Above it the common bile duct is dilated (reverse of specimen). The pancreas shows scattered pale areas of fat necrosis. Arising about 3cm proximal to the ampulla of Vater is a duodenal diverticulum with an opening 1.5cm across that extends into the head of the pancreas (seen from the front).
Diagnosis: Stone in the ampulla of Vater with acute pancreatitis, duodenal diverticulum

CASE 23217
The patient was a man aged 73 who presented with a three month history of dull pain in the mid thoracic region. This went into the back and also radiated around to the front of the epigastrium. He had not noticed any relationship to movement or food. However four weeks before admission he had noticed the presence of blood in one of his bowel motions. A few days before admission he began to have anorexia and also commenced regurgitating his food. The only significant finding on physical examination was a palpable liver 3cm below the right costal margin and a left deep vein thrombosis. Investigations showed a grossly elevated serum alkaline phosphatase and jaundice with a steadily rising serum bilirubin. A liver scan showed multiple filling defects. His pain became much worse and he died one month after admission.
The specimen consists of part of the liver, pancreas and duodenum. The plane of section of the liver is perpendicular to that of the pancreas and the liver has been rotated anticlockwise on the pedicle. There is a pale firm tumour 6cm in maximum diameter in the head of the pancreas that focally invades the wall of the

duodenum. Several enlarged lymph nodes are present above the pancreas. The liver parenchyma is jaundiced and contains a large number of variably sized, focally necrotic, coalescing metastatic deposits.
Diagnosis: Carcinoma of the head of the pancreas with lymph node and hepatic secondaries

CASE 24295
The patient was a woman aged 61 who had a 3-month history of dull epigastric pain radiating to both upper quadrants. Laparotomy was performed and showed a carcinoma of the tail of the pancreas with hepatic metastases.
The specimen consists of the distal oesophagus, a large stomach with duodenum, pancreas and spleen viewed from behind. Section along the main pancreatic duct and into the spleen demonstrates a normal head and body of the pancreas but the tail is involved by a fibrous-looking tumour, 35x20mm, which surrounds the distal end of the duct and is beginning to infiltrate the spleen that otherwise appears normal.
Diagnosis: Carcinoma of the tail of the pancreas

CASE 24397
This 63-year old man was admitted with mental deterioration, anorexia, difficulty swallowing and complaining of epigastric pain. He had a past history of CVA, hypertension, gout and urinary stones. He had a markedly elevated serum calcium, and despite therapy, deteriorated and died after a cardiac arrest.
The specimen consists of the pancreas cut longitudinally with a portion of duodenum. The pancreas is somewhat oedematous with many areas of fat necrosis lying between the lobules and in the adjacent retroperitoneal fat. There is associated antemortem thrombus in the splenic and superior mesenteric veins.
Diagnosis: Acute pancreatitis
What might the cause of this patient's acute pancreatitis be? Acute pancreatitis can occasionally be associated with hypercalcaemia. The cause of the latter in this patient is unknown but it may well have been responsible for his mental deterioration, anorexia and possibly even the renal stones, though these may have been associated with his hyperuricaemia.

CASE 25452
This woman aged 81 developed colicky abdominal pain accompanied by nausea and vomiting. She was treated with analgesic drugs, intravenous fluids and nasogastric suction. However her condition became worse and she was transferred from a country hospital to the RAH. On examination the BP was 190/110, the abdomen was distended and tympanitic, and there was tenderness in the right upper quadrant and epigastrium. X-ray suggested large bowel obstruction. She died the following day. At post-mortem there was 400ml of blood-stained fluid in the abdominal cavity.
The specimen consists of the pancreas, duodenum and spleen. The pancreas is somewhat oedematous and shows extensive patchy haemorrhagic necrosis. Foci of haemorrhagic necrosis are also present in adjacent retroperitoneal adipose tissue. Antemortem thrombus is present in the splenic and superior mesenteric veins in the substance of the pancreas. The spleen appears normal.
Diagnosis: Acute haemorrhagic pancreatitis

CASE 50449/82
The patient was a woman aged 83 who had a fall in which she suffered multiple fractures of the ribs and sternum.
The specimen consists of the pancreas that clearly demonstrates patchy, pale, chalky areas of fat necrosis within and around it.
Diagnosis: Acute pancreatitis

CASE 50183/83B
The patient was a man aged 56 with alcoholic cirrhosis..
The specimen of the pancreas shows the organ to be a rich russet brown.
Diagnosis: Haemochromatosis
Comment: This discolouration is due to a massive accumulation of haemosiderin within the pancreatic tissue. The accumulation of iron within the pancreas is damaging and gradually the pancreas becomes replaced by fibrous tissue. The islets of Langerhans and exocrine tissue are both lost and so the patient may develop diabetes and malabsorption. In this patient it was not established whether the haemochromatosis was primary or secondary.

CASE 50197/83
The specimen consists of the pancreas with attached spleen and duodenum. There is an irregular very ill-defined mass 7cm in diameter, similar in colour to the pancreas but which does not show the lobular architecture of the pancreas, with a central partly cystic pale area 2.5cm in diameter, arising in the tail of the pancreas and spreading out to infiltrate the spleen. The spleen also demonstrates a small white infarct superiorly. Above the body of the pancreas, an enlarged tumour replaced lymph node is present adjacent to a cut section through the thrombosed splenic vein.
Diagnosis: Carcinoma of the tail of the pancreas

CASE 50374/85
The patient was a man aged 78.
The specimen consists of the pancreas with attached segment of duodenum viewed from behind. In the head of the pancreas is an ill-defined pale tumour 5cm in diameter that is extensively necrotic and cavitating centrally. This area communicates with the duodenal lumen. White flecks in the fat of the body and tail of the pancreas suggest fat necrosis.
Diagnosis: Carcinoma of the head of the pancreas