Demonstration of a Complete Tear of the Pancreatic Duct by Magnetic Resonance Cholangiopancreatography (MRCP)

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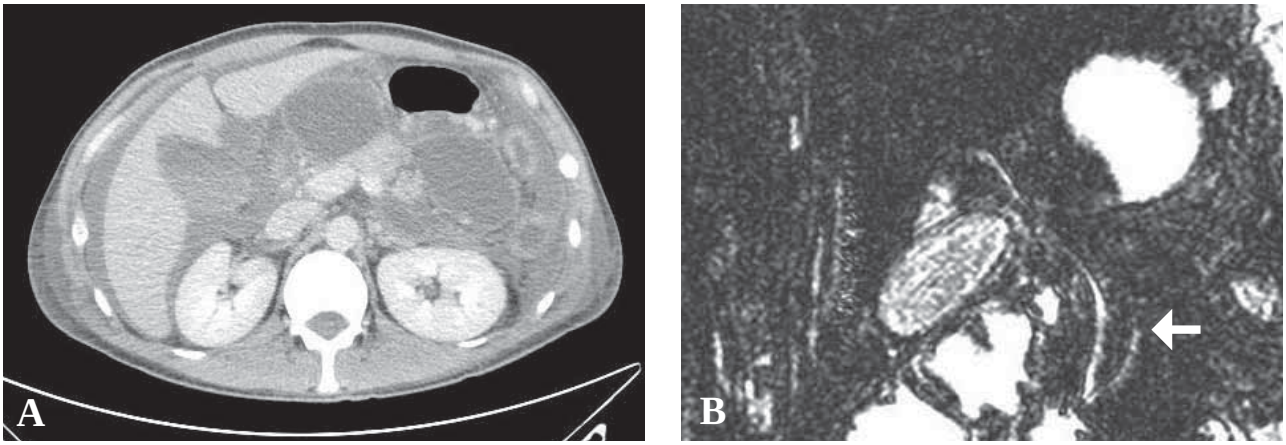

A 31-year-old man was involved in a motorcycle accident whilst riding and sustained a blunt abdominal injury. He was treated conservatively at a local hospital for 5 days before transferring to the Bangkok Hospital.

A whole abdomen CT showed a transverse tear at the body of the pancreas (Figure A) with hematoma at the anterior compartment of the retroperitoneum. The magnetic resonance cholangiopancreatography (MRCP) showed a good visualization of the common bile duct (CBD) and a distended gall bladder. Only the proximal of the pancreatic duct is visualized (see arrow Figure B). The findings suggested a complete tear of the pancreatic duct at the level of the body of the pancreas. The patient underwent an exploratory laparotomy. There was evidence of 2,000 ml of bloody fluid in the peritoneal cavity. A distal pancreatectomy was performed with drainage. He had an uneventful post operative course.

It is an art to handle a conservative management of pancreatic trauma. Previously observed cases of pancreatic injury resulted in high mortality rates. Today, we have CT scans and MRI which enables us to verify the extent of pancreatic tissue and pancreatic duct injury or the evidence of pancreatic cysts.[1] A CT of the abdomen is essential to properly evaluate the site of the organ injury. This is in order to verify the extent of internal organ trauma of the penetrated abdominal injury and to determine if the patient requires emergency surgery. In this case, a CT established laceration of the pancreas. Our hospital CT and MRI units are located close together. We are able to perform MRCP immediately. The total scan time for MRCP takes about 15 minutes using HASTE technique because this technique is performed during normal breathing and produces a 3D reconstruction.[2] The site of the pancreatic duct tear is well demonstrated. This is useful information for surgeons to make decisions and to minimize the operative time.

References

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