AB164. SOH22ABS178. Surgical management of intrahepatic choledocholithiasis in a patient with an aberrant right anterior hepatic duct draining into the cystic duct

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Background: An aberrant right anterior hepatic duct (ARAHD) draining into the cystic duct is an extremely rare clinical entity, with isolated cases reported in the literature, and is associated with high risk for intraoperative bile duct injury.
Methods: We describe the case of a 61-year-old female who presented with abdominal pain and deranged liver function tests. Magnetic resonance cholangiopancreatography (MRCP) demonstrated an ARAHD system draining into the cystic duct, with gallstones in the gallbladder and an obstructing stone within the ARAHD. Endoscopic retrograde cholangiogram (ERCP) demonstrated a normal appearing hilar confluence, with no opacification of the ARAHD due to obstructing stone.
Results: Open cholecystectomy and ARAHD exploration was undertaken. After retrograde mobilisation of the gallbladder, the cystic duct and artery were identified and ligated distal to the insertion of the ARAHD. A choledochotomy was made between stay sutures in the ARAHD and a large obstructing stone removed. Choledochoscopy showed no residual stones, and the duct was closed over a T tube. A T tube cholangiogram on postoperative day 4 showed no obstruction or leak and the patient made an uneventful postoperative recovery.
Conclusions: This case highlights the importance of recognition of aberrant biliary anatomy to avoid intraoperative bile duct injury. In particular, in the presence of an obstructed aberrant right anterior or posterior duct, the hilar confluence may appear normal at ERCP or intraoperative cholangiogram. Segmental intrahepatic duct dilation on MRCP and paucity of segmental intrahepatic duct opacification on ERCP should raise concern for ARAHD.
Keywords: Gallstones; anatomical abnormalities; cholecystectomy; endoscopic retrograde cholangiogram (ERCP); bile duct injury

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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