

## Hot Topics in Body MRI

April 25(Thursday) , 7:00AM - 7:25AM

### CHOLANGIOCARCINOMA: CASE STUDIES

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#### LEARNING OBJECTIVES:

1. To emphasize an optimal MR imaging protocol
2. To highlight role of MRI in the diagnosis and classification
3. To demonstrate the role of MRI in staging
4. To understand limitations of MRI and review “mimics” of cholangiocarcinoma

#### ABSTARCT:

Although Cholangiocarcinoma is a rare tumour (<2% of all cancer), it is the second most common primary Hepatobiliary malignant tumour after hepatocellular carcinoma (HCC). This tumour actually encompasses a diverse group of tumours varying greatly in location, growth pattern and histology resulting in a gamut of imaging manifestations. It is important to be familiar with those diverse manifestations to provide accurate detection and characterization. Since only surgery can provide curative therapy, accurate resectability assessment is critical. Defining an optimal MRI protocol which includes precontrast MR imaging along with high resolution MRCP sequences and Dynamic contrast acquisitions/MR angiography is necessary to ensure accurate results MRI offers unique advantages via its ability to provide information noninvasively in a single test regards tumour size, extent, vascular involvement, nodes and extrahepatic spread. MRCP can superbly display bile ducts upstream to an obstruction. MRI is not without limitations. In some cases other disease process may mimic cholangiocarcinoma and these will be discussed. At times MRI may not be able to confidently detect or stage the tumor and correlative imaging with Ultrasonography, CT and PET needs to be considered.

#### References:

- 1: Ruys A et al. Radiological staging in patients with hilar cholangiocarcinoma: a systematic review and meta-analysis. *Br J Radiol.* 2012 Sep;85(1017):1255-62.
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- 3: Charbel H, Al-Kawas FH. Cholangiocarcinoma: epidemiology, risk factors, pathogenesis, and diagnosis. *Curr Gastroenterol Rep.* 2011 Apr;13(2):182-7.
- 4: Chung YE et al. Varying appearances of cholangiocarcinoma: radiologic-pathologic correlation. *Radiographics.* 2009 May-Jun;29(3):683-700.
- 5: Choi JY et al. Hilar cholangiocarcinoma: role of preoperative imaging with sonography, MDCT, MRI, and direct cholangiography. *AJR Am J Roentgenol.* 2008 Nov;191(5):1448-57.
- 6: Vilgrain V. Staging cholangiocarcinoma by imaging studies. *HPB (Oxford).* 2008;10(2):106-9.
- 7: Masselli G et al. MR imaging and MR cholangiopancreatography in the preoperative evaluation of hilar cholangiocarcinoma: correlation with surgical and pathologic findings. *Eur Radiol.* 2008 Oct;18(10):2213-21.
- 8: Park HS et al. Preoperative evaluation of bile duct cancer: MRI combined with MR cholangiopancreatography versus MDCT with direct cholangiography. *AJR Am J Roentgenol.* 2008 Feb;190(2):396-405.