**Audit of ultrasonography findings in cases of abnormal MRCP**

**Descriptor:**

An audit to compare the findings on ultrasound performed prior to abnormal MRCP examinations.

**Background:**

Abdominal ultrasound is usually the first-line imaging investigation in evaluating the  biliary tree, but is highly dependent on both operator and patient factors

Extrahepatic biliary dilatation is the most sensitive and quantifiable method on ultrasound for indicating a biliary obstruction, but ultrasound has a relatively low sensitivity (25-60%) for the visualisation of causes of biliary duct dilatation (e.g intraductal calculi).

MRCP has a very high sensitivity and specificity for determining causes of biliary obstruction and is routinely used as a safe non-invasive second-line imaging investigation in patients with a dilated extrahaptic bilary duct on ultrasound.

## The Cycle

**The standard:**

Where MRCP demonstrates common bile duct dilatation, ultrasonography performed prior to the MRCP should identify a dilated extrahepatic biliary tree in 90% of cases.

**Target:**

1. 90% accurate identification of MRCP detected biliary dilatation on preceding ultrasound

2. The ultrasound should contain a specific comment referring to either the presence or absence of extrahepatic biliary dilatation - 100%

3. If the cause of biliary dilatation is not shown on ultrasound, appropriate recommendation for further imaging (MRCP or CT) or referral included in the report– 100%

## Assess local practice

**Indicators:**

- The description of a dilated common bile duct in the ultrasound report

- A clear recommendation for further imaging if no cause of biliary dilatation seen on ultrasound

**Data items to be collected:**

- 100 consecutive abnormal MRCP reports then identify how many had preceding ultrasound within a reasonable time frame (eg 4 weeks)

- Review reports of abdominal ultrasounds performed within theagreed timeframe prior to abnormal MRCP and document findings on ultrasound

**Suggested number:**

100

**Suggestions for change if target not met:**

• Present the findings to the local ultrasound user groups

• Emphasise the importance of mentioning the presence and cause of a dilated biliary tree on the report

• Emphasise especially the importance of stating appropriate recommendations for further imaging or referral if the cause of biliary dilatation is unclear on ultrasound

• Circulate results to individual users

**Resources:**

• With PACS collection of reports and review of images is greatly facilitated

• 5-10 hours to review reports and images if required

**References:**

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4. Yusuf T and Bhutani M. Endoscopic Ultrasonography and Bile Duct Stones. J Gastroenterol Hepatol 19(3):243-250,2004.
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**Editor's comments:**

If data is analysed with respect to individual operators this can be used for the purposes of revalidation.

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