P-BN39  The perils of MRCP requesting and early associations of data quality and likelihood of a diagnostic result

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Background: MRCP (Magnetic resonance cholangiopancreatography) is used most to assess the biliary tree for stones or strictures. Recently, MRCP availability has increased, and it is extensively used to detect of common bile duct (CBD) stones although very frequently no stones are seen. Indeed, the currently recruiting sunflower RCT aims to determine the clinical and cost effectiveness of expectant management versus MRCP in patients undergoing laparoscopic cholecystectomy at low or moderate risk of common bile duct stones. However, it is critical when requesting an investigation that adequate information is provided. This work aimed, to describe the adequacy of information provided and correlate this with the MRCP result. We hypothesised that the less information that was provided the more common a normal result would be.

Methods: For a three month period (January 2021 to April 2021) all MRCP requests to detect the presence of a CBD stone were reviewed and data obtained from the Radiology CRIS (CDN Radiology Information System, CDN, Sydney, Aus.). The requesting information was compared to three pre-defined criteria (CBD diameter, presence of gallstones and LFT details) that were agreed as the optimal information that a reporting radiologist would require. The number of key pieces of information for each request and whether the request identified a CBD stone were identified. The proportion of MRCPs detecting a CBD stone was calculated according to the number of key pieces of information provided.

Results: 56 patients were identified, of which 16 (29%) patients had CBD stones. In 24/56 (43%) patients the presence of gallstones on a previous ultrasound was provided, 14/56 (25%) of patients had information about LFTs including bilirubin and a trend in LFTs was not stated for any patient (0/56; 0%). The rate of stone detection was calculated by the number of pieces of information provided. The rate was 71% (5/7) when all 3 pieces of data were provided, 31% (2/13) when two piece of information were provided, 30% (8/27) when a single piece of information was provided, and only 11% (1/11) when none of the specified data were provided.

Conclusions: It is uncommon for adequate clinical information to be provided in MRCP requests and in 16% of request no key information was provided. The LFT results were frequently omitted and the trend in LFTs never stated. The more key data provided in the request saw a higher proportion of MRCPs where a CBD stone was identified. We recommend that maximal clinical information is mandated for MRCP request perhaps using mandatory fields on electronic requesting systems and that these systems are also used to facilitate recruitment to clinical trials such the Sunflower RCT.