

An Examination of our Results. Are We Achieving Similar Standards using Ultrasound in the Evaluation and Diagnosis of the cause of Obstructive Jaundice?

Background:

- Ultrasound is radiation free, inexpensive and readily available.
- The most common causes of obstructive jaundice are choledocholithiasis and pancreaticobiliary malignancies².
- Ultrasound is good at discriminating the presence of intra or extra-hepatic duct dilatation with a reported accuracy of 78–98% for detecting extra-hepatic obstruction.¹

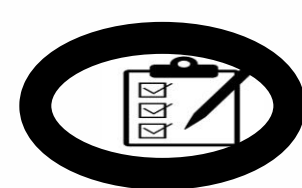
The South-West jaundice clinic investigates the cause of jaundice in patients referred by their GP and patients referred directly from Hepatologist. Eligible patients must have an obstructed biochemical liver profile and should be jaundiced. Importantly, cancer should not be suspected as such patients are investigated in a separate '2 week wait' cancer service clinic.

Method:

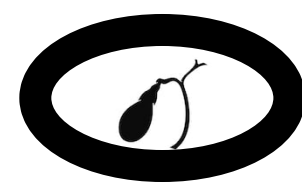
To ascertain if as a department, we are achieving similar results, of previous studies of identifying the level of obstruction, in patients with obstructive jaundice and finding a cause for the obstruction, a retrospective review of the reports and images on CRIS and Insignia of patients referred by their GP and Hepatologist to the Acute Jaundice Clinic, during a six month interval (March to August 2018) was undertaken.

The audit had not previously been carried out. During the six month interval 60 ultrasound scans were carried out.

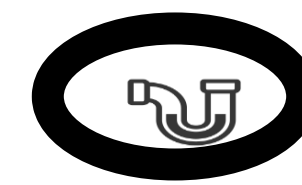
We set out to find the answer to the following questions:



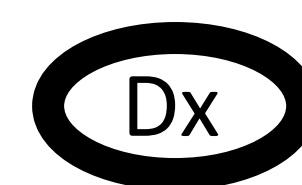
How many patients were jaundiced based on the clinical information provided on the referral form?



How many of the scanned patients had biliary duct dilatation?



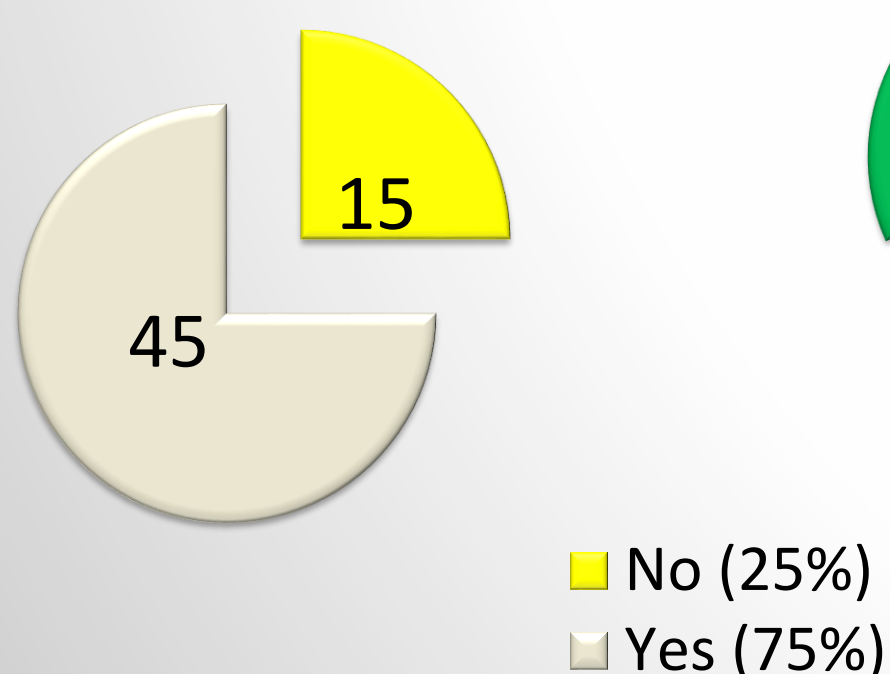
Was the level of obstruction found in those patients with biliary duct dilatation?



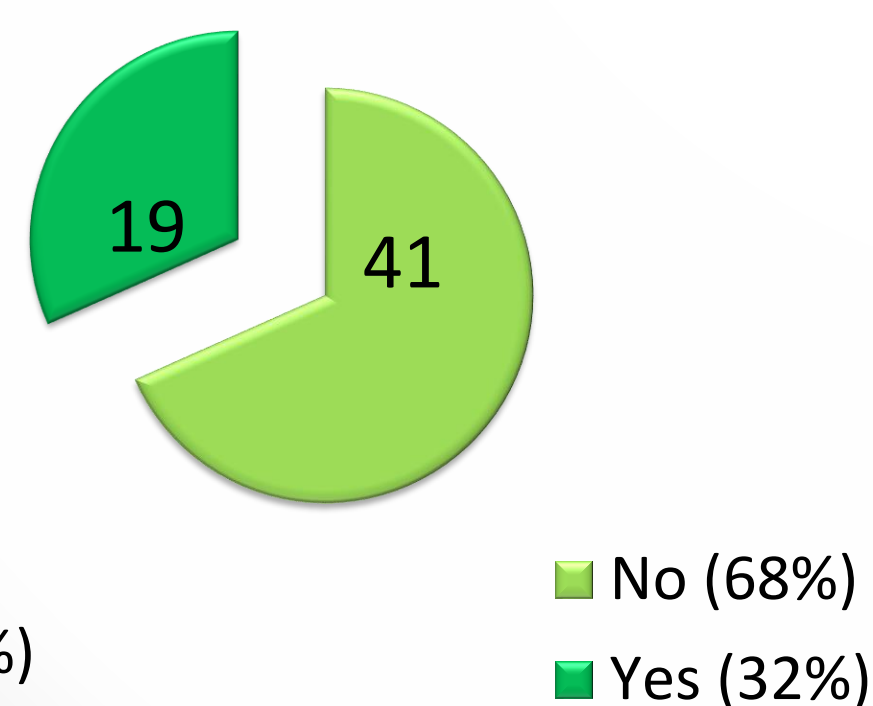
Was the cause identified in patients with biliary duct dilatation?

Results:

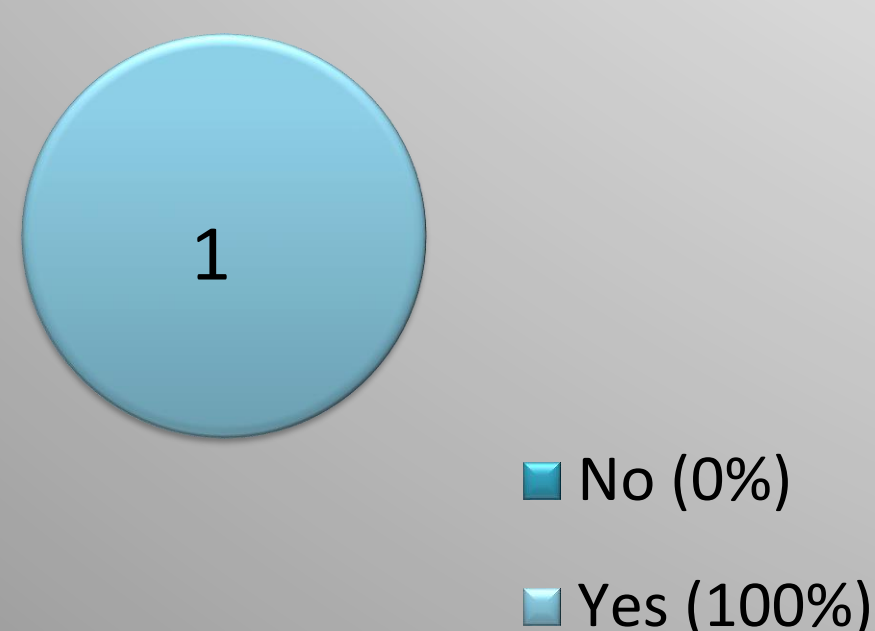
How many patients were Jaundiced on Clinical Information?



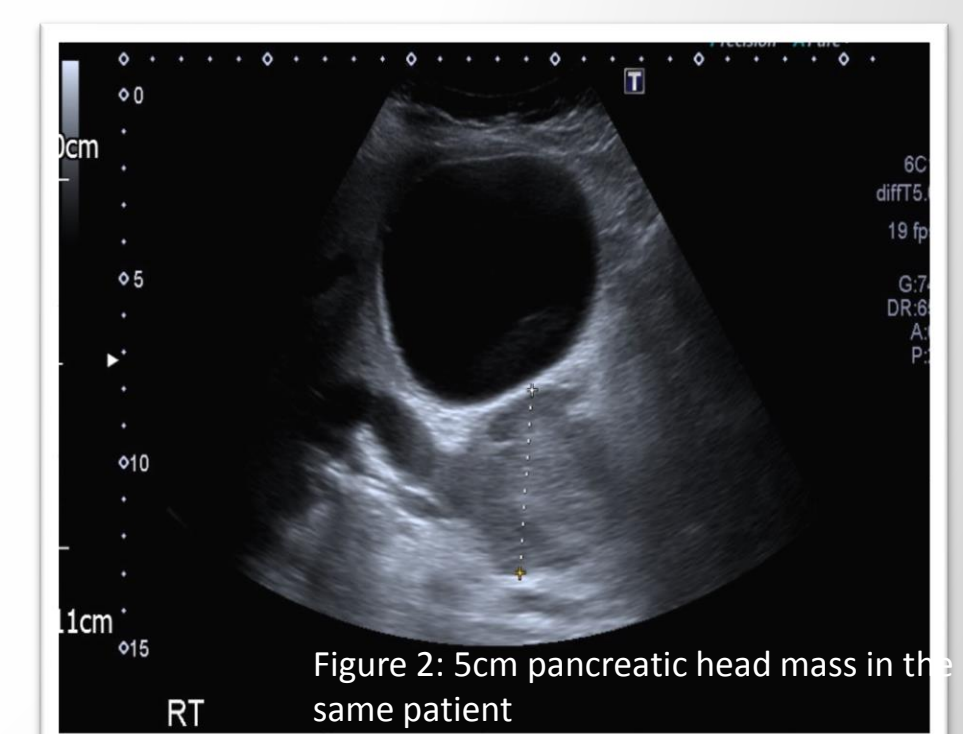
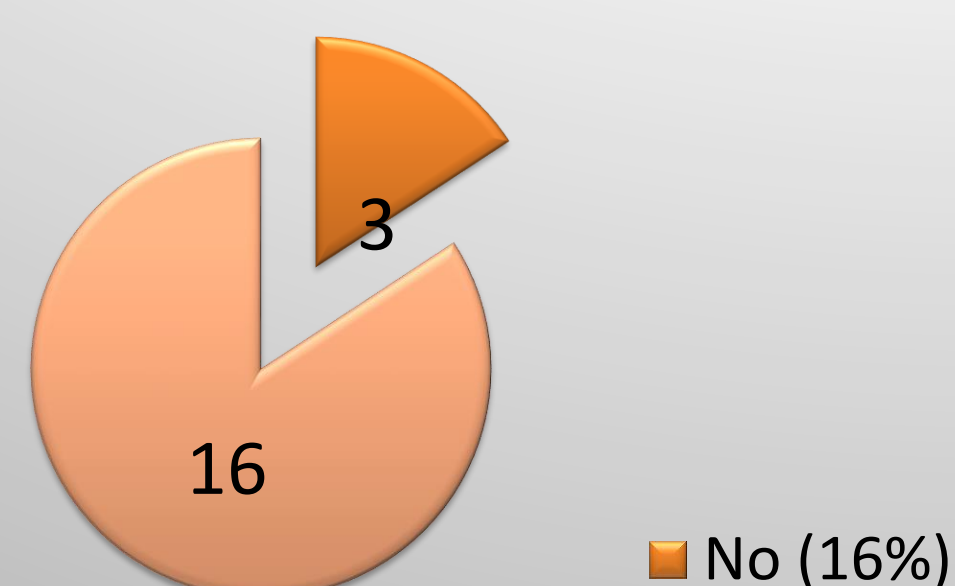
How many patients had Biliary Duct Dilatation?



Of the patients with Biliary Duct Dilatation, (n=19) how many was a level of Obstruction found?



Of the patients with Biliary Duct Dilatation, (n=19) how many patients was the cause of obstruction found?



Conclusion:

19 patients had biliary duct dilatation. The level of obstruction was documented in the reports of every patient with biliary dilatation. Our results are concordant with data from previous studies. Biliary duct dilatation was found in 32% of referrals to the jaundice clinic. Of those patients, a level of obstruction was reported in 100% of cases and a definitive cause was found in 84% of patients.

Our audit demonstrates that as a department we are achieving similar results as previous studies have reported. .

Ultrasound is a radiation free modality which can be used for successful identification of biliary duct dilatation with reproducible results.

References

1. Tse F, Barkun JS, Romagnuolo J, Friedman G, Bornstein JD, Barkun AN. Nonoperative imaging techniques in suspected biliary tract obstruction. *HPB (Oxford)*. 2006;8(6):409-25.
- 2 Y.H.A Tang, K.C.H. Lau, L.M.F. TEE, E.Kan, Hong Kong/CN, Performance of ultrasound in evaluating patients with obstructive jaundice, ECR,2013