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## Aim:

To determine the incidence of malignancy at presentation and the subsequent risk of malignancy (at 12-month follow-up) in a cohort of patients with double duct sign on cross-sectional imaging but no visible stigmata of jaundice.

The study also correlated malignancy with liver enzyme dysfunction and estimated the resource burden incurred investigating these patients.

## Methods:

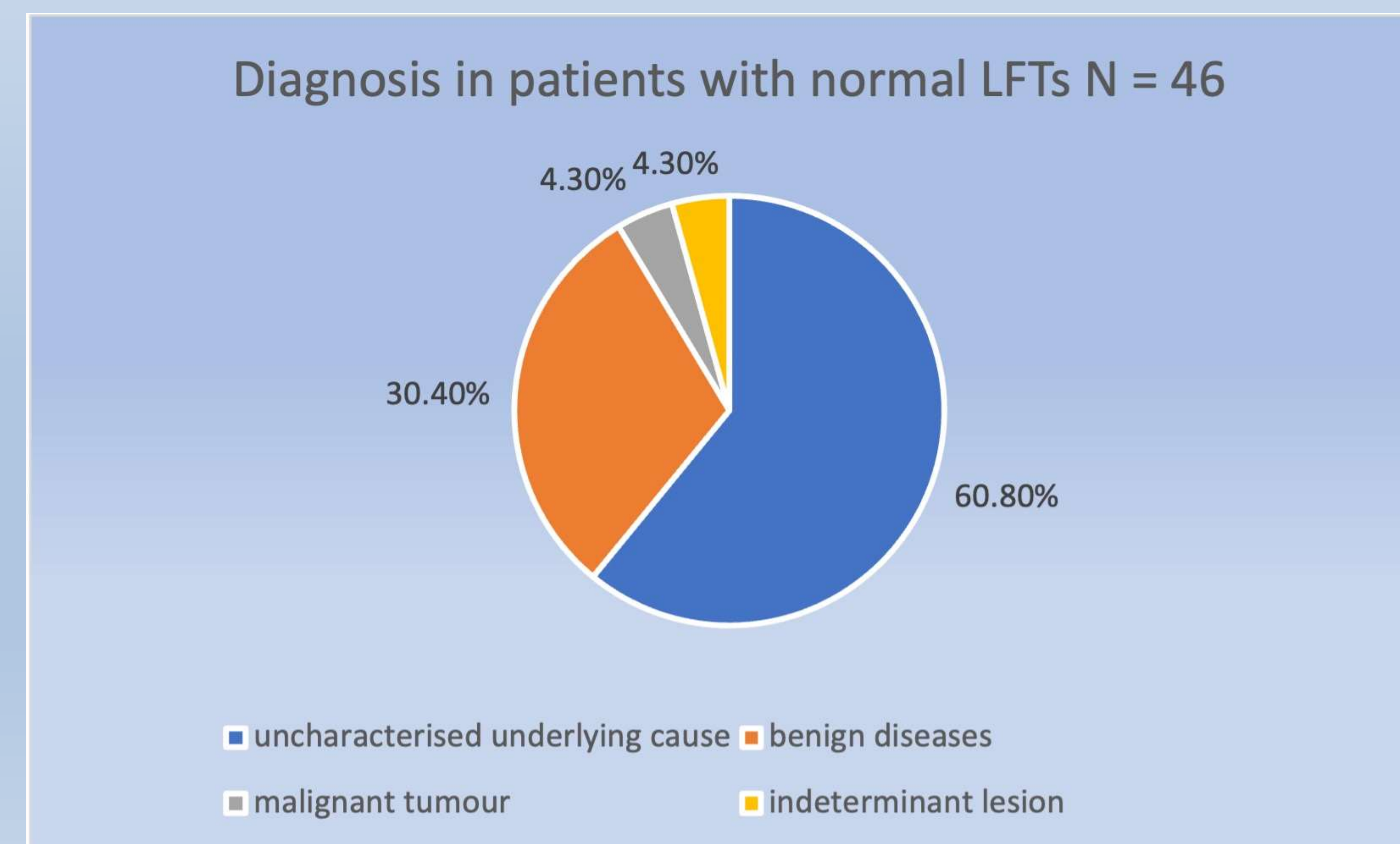
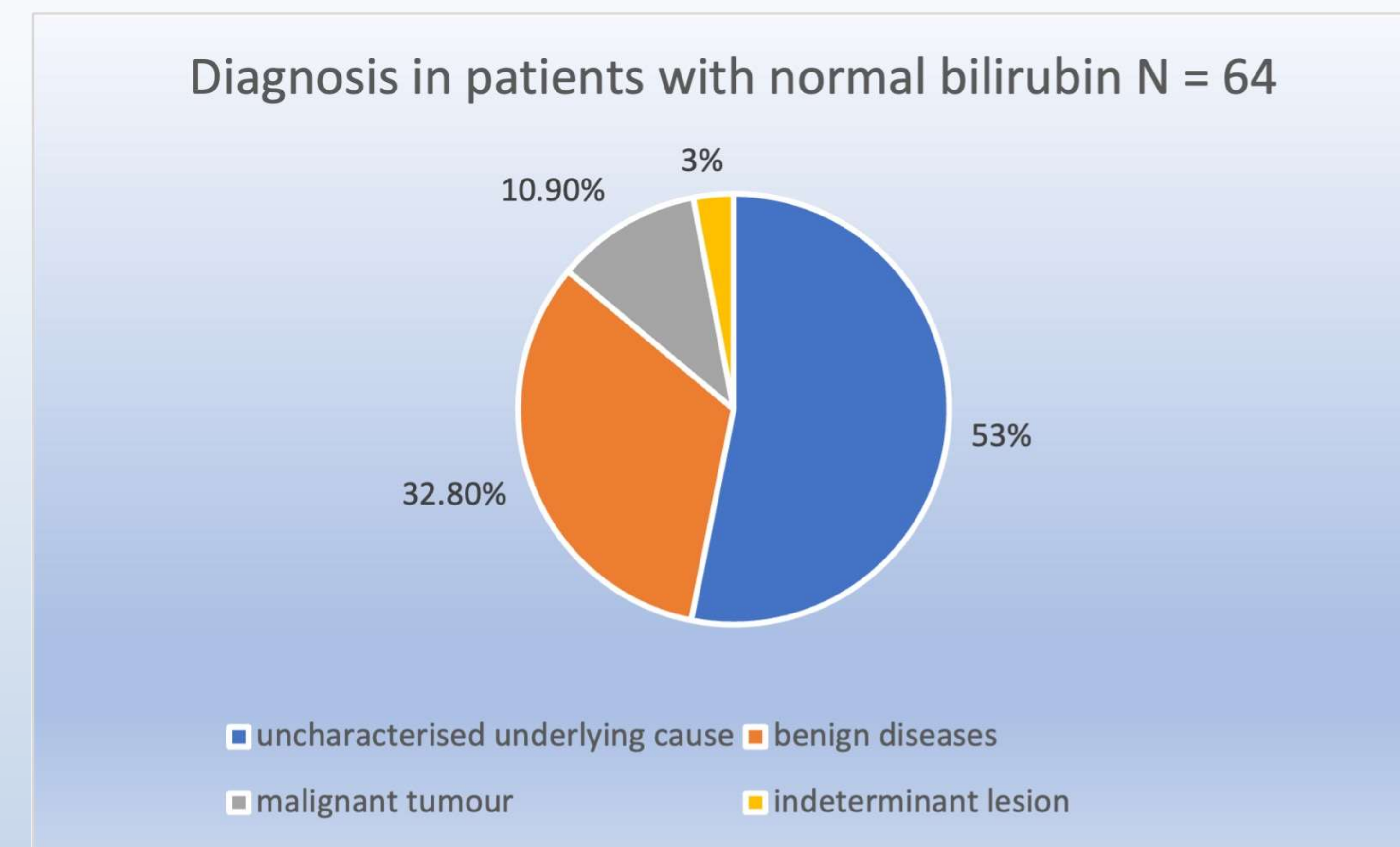
A search for “double duct sign” in a HPB tertiary database -between March 2017 and March 2022 was undertaken.

The cohorts' radiological reports, clinic letters, blood results, endoscopy reports and multidisciplinary meetings (MDT) outcomes were reviewed during this period.

## Results:

Total patients with DDS: 97

Patients with normal bilirubin included in the analysis: 64 (66%)



## Follow-up:

Patients with benign diagnoses or those where cancer was excluded without a definitive diagnosis did not develop malignancy at 12 months.

## Extended Surveillance:

Patients with uncharacterized underlying causes required extended surveillance.

**80 multidisciplinary meetings (MDT)** were conducted.

Multiple surveillance scans: **103 CT scans, 65 MRI scans.**

## Endoscopic Ultrasound (EUS):

26 patients underwent EUS.

3 patients required more than one EUS (cumulative total: 29).

## Cost Implications:

The total cost of investigations: **£38,926.89.**

## Conclusion:

Despite most patients not having an underlying malignancy, up to 10% of incidentally found DDS but with no clinical jaundice will have an underlying malignancy including 4.3% of patients will have malignancy with completely normal liver enzyme values.

This cohort of patients, therefore, need careful investigation despite the resource burden entailed. Further larger scale studies are warranted to stratify risk according to serological values and any constitutional symptoms e.g. weight loss.

