Cystic fibrosis (CF) is a systemic illness resulting from loss of function of the CFTR protein on secretory epithelium. CF liver disease (CFLD) remains under recognised, despite being the third leading cause of mortality in CF. This study determined the prevalence of CFLD and CFLD-cirrhosis in a cohort of adult CF patients. Adherence to local surveillance protocols for diagnosing and monitoring these conditions, including engagement of specialist hepatology services, was assessed.

The study identified 270 patients with a diagnosis of CF in the West of Scotland Adult Cystic Fibrosis Service. Electronic clinical records were reviewed to determine the prevalence of pre-existing diagnoses of CFLD and assess for evidence of cirrhosis in these patients. The study assessed if standards, as determined by local protocols, of liver monitoring and hepatology service involvement in non-CFLD, CFLD and CFLD-cirrhosis patients were met.

The average age of the cohort was 32 years (range 16–71) and 145 were male. There was a pre-existing diagnosis of CFLD in 80/270 patients (30%), with evidence of cirrhosis in 23 patients (29% of CFLD patients; 9% of the total cohort). Of those with CFLD/CFLD-cirrhosis, regular follow up with or previous discharge from hepatology services occurred in 34/80 patients (43%).

The local standard of yearly liver function tests [LFT] in non-CFLD and non-cirrhotic CFLD patients and 6-monthly LFT in CFLD-cirrhosis patients was met in 241/270 individuals (89%). The local standard of ultrasound 5-yearly in non-CFLD patients, 2 yearly in non-cirrhotic CFLD patients and 6 monthly in CFLD-cirrhosis patients was met in 190/270 individuals (70%). Of those with CFLD, 41/80 (51%) had been assessed with Fibroscan. Of those with CFLD-cirrhosis 15/23 (65%) had an AFP measured at any point with 2/23 (9%) having had an AFP within 6 months and 17/23 (73%) had received an OGD at any point. [See table 1].

CFLD is a source of significant morbidity and mortality in CF patients and affects 30% of our patient population, with 9% of our CF cohort having evidence of cirrhosis. Despite this, a risk of delayed or missed diagnosis has been identified due to non-CFLD patients not receiving LFT and USS monitoring as per local protocol. There is also significant room for improvement in ensuring those with CFLD and CFLD-cirrhosis are referred to hepatology services which would also assist in ensuring appropriate ongoing disease monitoring - particularly Fibroscan to aid diagnosis of CFLD-cirrhosis and ensure appropriate HCC and variceal surveillance.

**REFERENCE**