



SAT-503

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INTRODUCTION AND AIM

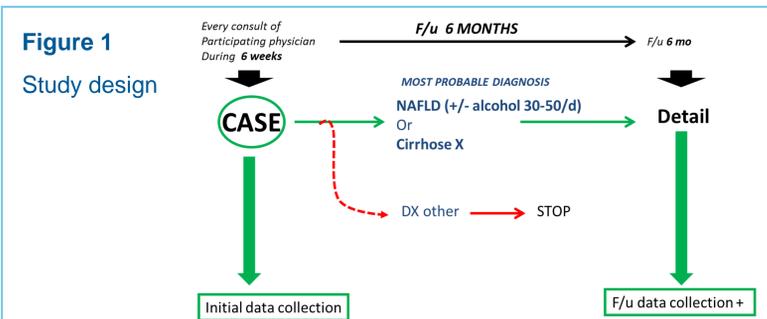
Non-alcoholic fatty liver disease (NAFLD) has become one of the most prevalent chronic liver diseases in Western countries but no real-world data on the burden of NAFLD on health-care resources are available from European countries. The proportion of patients with NAFLD seen in outpatient visits and the utilization of medical resources for the management of these patients are unknown.

This study aimed to assess the prevalence of NAFLD among outpatients in a specialized liver clinic at a tertiary care center.

METHOD

All outpatient visits at the hepatology clinic of the University Medical Center Mainz were recorded and analyzed in a time frame over 20 weeks in 2 independent intervals in 2016 and 2017. Data of patients with suspected NAFLD from the 2016 cohort was available for a 6 month follow-up study and the utilized resources, final diagnosis and disease severity was analyzed in this group. **Figure 1** summarizes the study design.

Patients were evaluated for suspicion of NAFLD due to steatosis or metabolic risk factors, abnormal LFTs (transaminases or GGT), high serum ferritin or cryptogenic cirrhosis. Exclusion criteria were alcoholic cirrhosis with a daily alcohol > 50 g/d, viral disease, autoimmune liver disease, hepatic tumors, suspicion of DILI or other causes of acute hepatitis. Patients after OLT were excluded. No patients scheduled for RCT were included.



RESULTS

A total of 1973 patients (mean age 51.9 ±15.3 y, 51% females) were seen in the outpatient clinic of the University Medical Center Mainz as part of this ongoing project. In the work-up 89% of patients underwent blood tests in addition to testing performed by the primary referring physician. In 72% of cases additional imaging by ultrasound and 20% Fibroscan were performed. A liver biopsy was ordered in 7% and 2.4% of patients were hospitalized. Reason for referral and initial assessment at the liver clinic resulted in a working hypothesis in 96.2% of cases (**Figure 2**).

Patients with suspected NAFLD (blue bars) presented with steatosis on imaging studies (41.6%), altered liver function tests (33.5%), increased ferritin level (2.4%) or cirrhosis of unknown origin (22.5%) as the primary cause for referral. A follow-up visit was scheduled in 78 % of patients with suspected NAFLD.

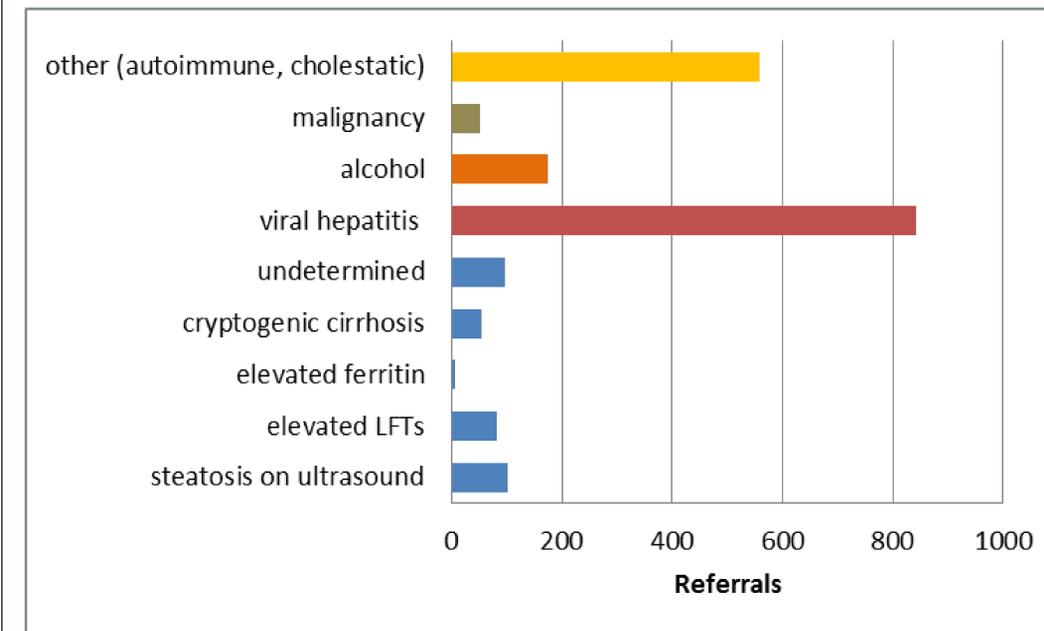


Figure 2: Bar graph showing absolute numbers of referrals to a tertiary, academic Hepatology outpatient clinic at the University Medical Center Mainz, Germany over a total of 20 weeks in 2 independent intervals in 2016 and 2017. Vertical axis shows primary reason for referral.

Follow-up data after 6 months was available for 1189 patients and are summarized in **Figure 3**. NAFLD was confirmed in 80 patients (50%) with 23% being diagnosed with NASH on liver biopsy, 10% NAFL on liver biopsy and 9% had NAFLD cirrhosis. 14% of patients did not undergo biopsy but remained with the diagnosis of suspected NAFLD. In 24% of patients a final diagnosis was not established in the 6 month follow-up period

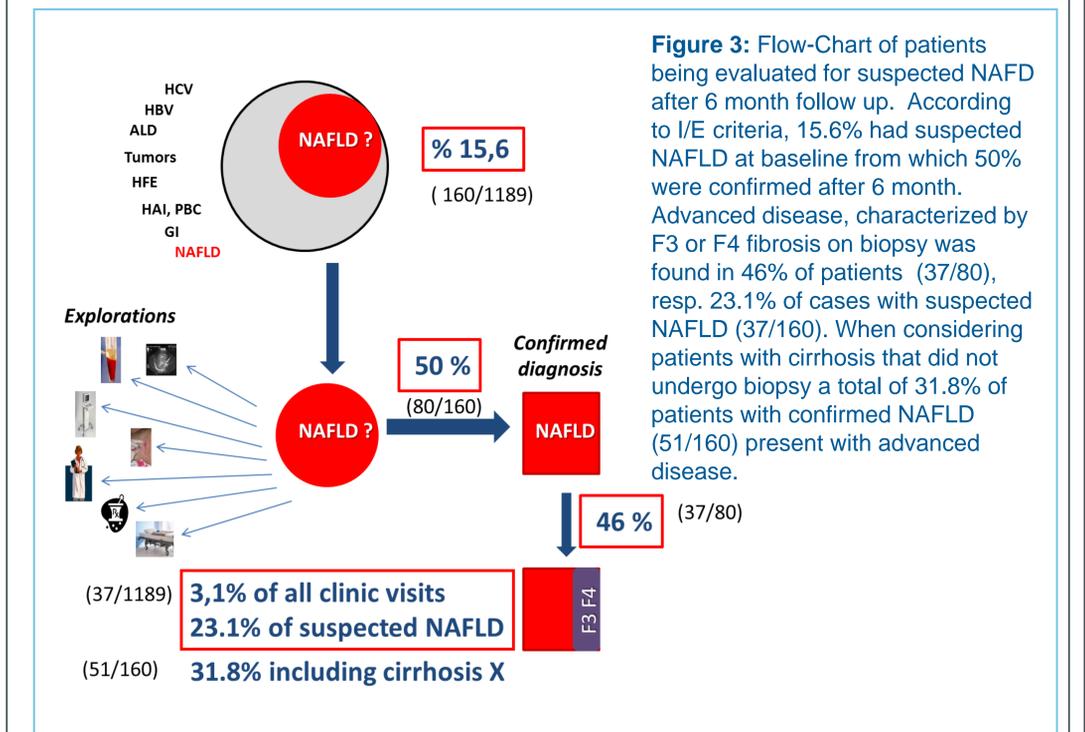


Figure 3: Flow-Chart of patients being evaluated for suspected NAFLD after 6 month follow up. According to I/E criteria, 15.6% had suspected NAFLD at baseline from which 50% were confirmed after 6 month. Advanced disease, characterized by F3 or F4 fibrosis on biopsy was found in 46% of patients (37/80), resp. 23.1% of cases with suspected NAFLD (37/160). When considering patients with cirrhosis that did not undergo biopsy a total of 31.8% of patients with confirmed NAFLD (51/160) present with advanced disease.

The resources utilized – excluding physician consultation - to reach these diagnosis were ultrasound in 86%, 31% Fibroscan, 5% MRI, 8% CT, and 37% liver biopsy. Cost analyses for medical resource utilization will be presented. Health-Care expense in this cohort with confirmed NAFLD were estimated at 1.416,94 EUR with 76% of expenses related to liver biopsy.

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CONCLUSIONS

In this prospective study, based on real-world data, 15.6% of patients at a Hepatology outpatient clinic were referred with a presumptive diagnosis of NAFLD, which was the second most common cause of consultation. Of these, half had confirmed NAFLD including 46% (3.1% of the entire cohort in 2016) with advanced fibrosis/cirrhosis. Both the prevalence of this condition and medical resource utilization and related costs are indicative of the substantial burden of disease NAFLD places on hepatological practice.

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