The effect of Hepatitis B virus infection on Steatosis in Hepatitis C virus co-infected patients: the BOSTIC study

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Background: We examined the influence of coinfection with HBV on prevalence and severity of different types of steatosis (i.e. viral vs metabolic) in chronic HCV.

Methods: We retrospectively assessed steatosis prevalence and severity in chronic HBV/HCV coinfected patients with a liver biopsy at time of coinfection. Exclusion criteria were excessive alcohol consumption, type 2 diabetes and antiviral therapy at time of liver biopsy. HCV-monoinfected controls were matched according to BMI, HCV viremia and genotype.

Results: 78 HBV/HCV coinfected patients and 115 HCV controls were included. Clinical characteristics of HBV/HCV coinfected patients were: average age: 42 years, males: 68%, average BMI: 25.1 kg/m², cirrhotic: 24%, genotype 3: HCV: 26%, undetectable HBV viremia: 31%. There was no significant difference in steatosis prevalence between the HBV/HCV coinfected group and the HCV group (42% vs 44%, p=0.40). When including only HCV genotype 3 patients with BMI<25 kg/m² (n=12 coinfected HBV/HCV) there was no difference in steatosis distribution and severity between coinfected and HCV monoinfected patients (p=0.28).

Conclusions: Based on these preliminary findings it appears that HBV is not affecting prevalence and intensity of steatosis in HBV/HCV coinfected patients vs HCV monoinfected patients, even in the subgroup of HCV genotype 3 patients with normal BMI.

EUS-guided fine needle aspiration (EUS-FNA) in pancreatic masses: a prospective randomized study comparing the yield of 22G and 25G needle in the same patient

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Introduction: EUS-FNA has become a standard in pancreatic masses diagnosis. It can be performed with a 22G or a 25 G needle. It remains unclear if the 25G have the same diagnostic ability as the 22G. To evaluate it, we performed a prospective, randomized, double-blind, non-inferiority study.

Patients and methods: Patients presenting with pancreatic solid masses between July 2010 and June 2012 were included. They underwent EUS-FNA using a 22G needle and 25G needle during the same endoscopic session. Three passages without stylet were performed with each needle. The 25G and 22G needle sequence being randomized. Cytological preparations included smear cytology, ThinPrep and Cell Block. Specimens were analyzed for diagnosis, cellularity, amount of blood and digestive contamination. Final diagnosis was based on cytology report, surgical pathologist if available, repeated diagnosis imaging and clinical follow-up.

Results: 37 patients were included. For 34 malignant pancreatic neoplasms was the final diagnosis. Diagnosis yield of 25G and 22G needles were 85.3% (29 patients) and 88.2% (30 patients) respectively (p=0.4). The quality of specimens was comparable regarding cellularity, blood and digestive contamination. No complication occurred.

Conclusion: Our study demonstrates the non-inferiority of the 25G needle’s performance compared the 22G for the diagnosis of pancreatic masses.

Intraoperative microperfusion patterns during colorectal resection: Preliminary results of 18 patients.

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Background: Perfusion impairment at the anastomotic site is one of the most important risk factors for anastomotic leakage (AL). Visual assessment of intestinal microperfusion during surgery has been found to be inefficient to predict AL. Microperfusion patterns during surgery are unknown and reliable intraoperative assessment of intestinal microperfusion is not established yet.

Methods: Patients undergoing colorectal resection between July 2013 and March 2014 were recruited. Measurements using a Visible Light Spectroscope (VLS) were conducted during colorectal resection. Reference: at the caecum (M1) and proximal to planned resection (M2). After resection and distal (M3) and distal (M4) to the planned resection. After anastomosis: 1-cm proximal (M5) and distal (M6) to the anastomosis.

Results: 18 patients with median age of 70y (IQR 56; 79) were included. Main operation was laparoscopic sigmoidectomy (n=9, 50%). Median duration of VLS measurement was 2:09 min (IQR 1:30, 5:45). The following median (IQR) serosal ST02 were observed: M1: 67% (60; 70), M2: 66% (57, 68), M3: 71% (57, 76), M4: 68% (52; 74), M5: 70% (57, 76), M6: 69% (61; 76).

Conclusions: Intraoperative microperfusion patterns during colorectal resection show individual differences with a trend of increasing variability of ST02 following mobilization and anastomosis. However, more patients need to be included to correlate serosal ST02 levels with patient outcome and complications.