■ ♣Sat-011 ■

Non-invasive diagnostic tool for Liver Fibrosis, Steatosis, and NASH in Biopsy-proven NAFLD Patients

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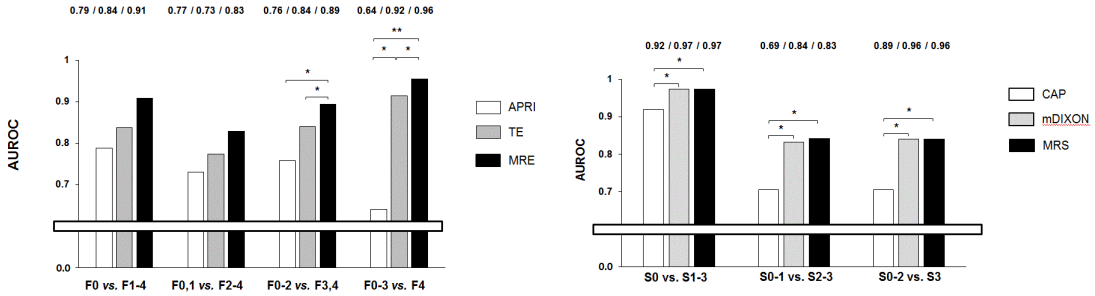
Background/Aims: Nonalcoholic fatty liver disease (NAFLD) is becoming a major cause of chronic liver disease worldwide. In this broad spectrum disease, researching Non-invasive method is urgently needed to identify more severe form of disease including nonalcoholic steatosis and advanced fibrosis. In this study, we compared hepatic fibrosis and steatosis using MR imaging and transient elastography (TE) and tried to find non-invasive diagnostic marker for NASH and advanced fibrosis in Biopsy-proven NAFLD Patients. **Methods:** This is a multicenter prospective study of patients with biopsy-proven NAFLD. The patients were underwent laboratory test, liver biopsy, MRI and TE 6 months before enrollment. MRI examination included mDIXON, MR spectroscopy (MRS), and MR elastography (MRE). TE measured liver stiffness and controlled attenuation parameter (CAP). **Results:** From October 2016 to March 2018, 94 biopsy-proven NAFLD patients were enrolled. Mean age and BMI of the patients were 51.29 ± 13.38 years and 29.12 ± 5.64 kg/m^2, respectively. Female was dominant (58, 61.7%) and other co-morbidities were diabetes (*n*=37, 39.4%), hypertension (*n*=39, 41.5%) and dyslipidemia (*n*=28, 29.8%). For diagnosis of advanced fibrosis (stage 3-4), the AUROC of MRE tended to be superior (0.844; 95% CI, 0.748-0.915) comparing with TE (0.787; 95% CI, 0.683-0.870) (P=0.272)(figure1). For diagnosis of severe steatosis (stage 2-3), CAP (0.706; 95% CI, 0.595-0.802) showed lower AUROC compared with mDIXON (0.832; 95% CI, 0.733-0.905; P=0.027) and MRS (0.842; 95% CI, 0.744-0.913; P=0.029), respectively(figure2). Age, BMI, DM, dyslipidemia, AST, platelet are associated with NASH in univariate. In multivariate analysis AST, PLT, and MRE were significant factor for diagnosis of NASH. **Conclusions:** MRI (mDIXON, MRS and MRE) tended to identify more severe steatosis and fibrosis compared to TE in patients with biopsy-proven NAFLD. AST, PLT, and MRE were significant factor for diagnosis of NASH. Therefore, non-invasive modalities using AST, PLT, and MRI could be potential tools for diagnosis of NASH.



■ ♣Sat-012 ■

Efficacy and safety of FOLFIRINOX in elderly patients with advanced pancreatic adenocarcinoma

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Background/Aims: Although FOLFIRINOX showed improved efficacy in advanced pancreatic cancer (PC), physicians still hesitate to administrate FOLFIRINOX in elderly patients, even if they have good performance status. We investigated efficacy and toxicity of FOLFIRINOX in elderly patients with advanced PC. **Methods:** We retrospectively reviewed medical records of advanced PC patient treated with first-line FOLFIRINOX from 2011 to July 2017 in a single tertiary hospital. All the patients were divided into two groups: non-elderly group A (age<70) and elderly group B (age ≥ 70). The primary end point was to compare the overall survival (OS) between two groups and the secondary end points were to compare the progression free survival (PFS) and toxicity. Cox proportional hazard model was used to analyze survival and prognostic factors. **Results:** A total of 214 patients (group A 176; group B 38) met the eligible criteria. Among them, 30.4% of the patients had locally advanced PC and 69.6% of the patients had metastatic PC. Median age was 61 years (group A 59; group B 73) and median cycle of FOLFIRINOX was 7.0 (1–75, group A 7.0; group B 7.0). There was no difference between group A and group B, in terms of OS (11.8 and 12.0 months, hazard ratio [HR] 1.150, 95% confidence interval [CI] 0.775–1.706) and PFS (7.1 and 8.7 months, hazard ratio [HR] 0.975, 95% confidence interval [CI] 0.659–1.442). Although larger number of patients received dose reduced regimen in at the first cycle in group B (25/38, 65.8%) compared to in group A (13/176, 7.2%), group B did show comparable OS (P=1.084) and PFS (P=0.053) by multivariate analysis. In terms of toxicities, there was no difference in hematologic toxicities, vomiting and sensory neuropathy. However, fatigue and diarrhea occurred more often in group B (10.0% vs. 48.6%, P=0.000; 4.7% vs. 18.9%, P=0.003). **Conclusions:** Our data suggest that elderly PC patients receiving FOLFIRINOX shows comparable long-term outcomes with those of non–elderly patients, although the former received reduced dose intensity of FOLFIRINOX. Therefore, FOLFIRINOX would be considered as a first –line regimen in elderly advanced PC patients with good performance, given comparable long–term survival and toxicities.

Table 2. Univariate & Multivariate analysis for OS

Factor (No. of patients)	Median OS (months)	95% CI (months)	Univariate			Multivariate		
			HR	95% CI	P value	HR	95% CI	P value
Overall patients	11.8	10.6– 13.0						
Age groups, No (%)								
<70 years (175)	11.8	10.2– 13.4						
≥70 years (38)	12.0	8.8– 15.3	1.165	0.785–1.728	0.449	0.670	0.414	1.084
Sex								
Male (128)	11.0	8.5– 13.5						
Female (85)	13.4	10.4– 16.3	0.742	0.543– 1.012	0.060			
Initial Albumin								
<3.5 (49)	7.4	4.3– 10.4						
≥3.5 (164)	12.3	10.8– 13.7	0.627	0.439– 0.895	0.010	0.797	0.523-1.215	0.797
Initial NLR								
< 3.0 (116)	13.7	11.0– 16.1						
≥3.0 (96)	8.2	6.8– 9.6	1.626	1.202– 2.201	0.002	1.563	1.111-2.200	0.010
Initial ECOG								
0(42)	12.5	9.5– 15.5						
1(155)	12.1	10.7– 13.5	0.936	0.620– 1.415	0.755			
≥2(15)	3.9	2.4– 5.4	7.803	3.890–14.474	0.000			
ECOG change in 3 months								
-1~0(141)	15.2	11.9– 18.5						
1(46)	8.0	6.3– 9.8	2.716	1.869– 3.948	0.000			
2(20)	3.9	2.6– 5.2	6.724	4.043–11.181	0.000	3.022	2.206-4.141	0.000
Bwt. loss in 3 months								
No(149)	14.5	12.6– 16.5						
Yes(41)	8.0	6.5– 9.6	2.133	1.471– 3.093	0.000	1.583	1.055-2.379	0.027
N/A()								
No. of metastasis								
0(65)	15.2	11.9– 18.5						
1(104)	11.5	9.2– 13.8	1.538	1.067– 2.216	0.021			
≥2(44)	6.2	3.7– 8.7	3.514	2.262– 5.457	0.000	1.785	1.394-2.288	0.000
Previous op hx								
No(164)	11.1	9.5–12.8						
Yes(35)	20.0	13.5– 26.5	0.488	0.317– 0.750	0.001	0.828	0.625-1.090	0.176