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INTRODUCTION

- Myelodysplastic syndromes (MDS) hematopoietic stem-cell characterized by ineffective production.
- Most MDS patients eventually become red blood cell transfusion dependent, risking iron overload, which may lead to cardiac and hepatic failure.
- Liver biopsy is the gold standard for liver Ο damage assessment. However it is associated with a number of complications.



Liver transient elastography (TE, Fibrocan[®]-Echosens Paris) allows the estimation of hepatic fibrosis through the measurement of liver stiffness.

AIM

Our aim was to explore possible associations of liver stiffness measured with TE, with transfusion overload and ferritin level in a group of patients with MDS.

PATIENTS AND METHODS

- 20 patients with MDS were studied. Ο
- Patients with other causes of chronic liver \bigcirc disease were excluded.
- The following variables were collected the 0 same day of TE evaluation: Serum ferritin, hemoglobin, platelets, aminotransferases, gglutamiltransferase (GGT), total bilirubin

THE ROLE OF TRANSIENT ELASTOGRAPHY IN THE ASSESSMENT OF LIVER FIBROSIS IN PATIENTS WITH MYELODYSPLASTIC SYNDROMES

RES	ULTS		RESULTS						
DEMOGRAPHIC	CHARACTERIST	ICS	Level of serum ferritin is associated with liver stiffness in patients with MDS						
	17	85%							
-range)	73.9 years	60-87	Mann Whitney 2500						
-range)	24.5 Kg/m ²	21-29	E 2000 N=12 P=0.005						
1DS (N-%)	11	55%	L 1500						
diagnosis (mean-	4.6 years	1-21	E 1000 N=8 500						
ns ≥25 units	12	60%	ອ 500 ດ						
reatment (N-%)	5	25%							
ASSOCIATION OF LIVER STIFFNESS			MULTIVARIATE ANALYSIS						
TORY DATA	Mean (range)	P (Pearson)	ModelLog (stiffness)(constant)P < 0.0001						
	1603 (67-6399)	Log (stiffness) 0.004	Ferritin P = 0.035 GGT P = 0.026						
μL)	238 (10-800)	0.002	PLT P = 0.091						
	44 (10-134)	<i><0.001</i>	 CONCLUSIONS Our data is suggesting that liver stiffness measured by TE was found to be correlated with serum ferritin level, GGT and platelets. 						
	20 (12-49)	<i>0.917</i>							
	24 (6-81)	<i>0.553</i>	 Further investigation is needed in order to explore the role of TE for the assessment of chelation therapy on liver fibrosis in patients with MDS syndromes and post-transfusion iron overload. 						
No conflict	0.94 (0.26-2.5) t of interest	0.637							

RESULTS				RESULTS					
DEMOGRAPHIC CHARACTERISTICS				Level of serum ferritin is associated with liver stiffness					
Male(N - %)	17	85%	in patients with MDS						
Age (mean -range)	73.9 years	60-87	erum Ferritin	2500	Mann Whitney				
BMI (mean-range)	24.5 Kg/m ²	21-29		2000	P=0.005	N=12			
High-risk MDS (N-%)	11	55%		1500					
Years from diagnosis (mean- range)	4.6 years	1-21		1000 500	N=8				
Transfusions ≥25 units	12	60%	ഗ്	0					
Chelation treatment (N-%)	5	25%			stif ≤ 7,1 stif	> 7,1			
ASSOCIATION OF LIVER STIFFNESS			MULTIVARIATE ANALYSIS						
LABORATORY DATA	Mean (range)	P (Pearson)		lel stant)	Log (stiffness) P < 0.0001				
Ferritin	1603	Log (stiffness)	Ferri	itin	P = 0.035				
(µg/mL)	(67-6399)	0.004	GGT		P = 0.026				
PLT	238	0.002	PLT		P = 0.091				
(x10 ³ cells/μL)	(10-800)								
GGT (IU/L)	44 <0.001		CONCLUSIONS						
AST	(10-134) 20	0.917	 Our data is suggesting that liver stiffness measured by TE was found to be correlated with serum ferritin 						
(IU/L)	(12-49)								
ALT	24	0.553		 level, GGT and platelets. Further investigation is needed in order to explore 					
(IU/L)	(6-81)			the role of TE for the assessment of chelation					
Bilirubin	0.94	0.637							
(mg/dL)	(0.26-2.5)			therapy on liver fibrosis in patients with MDS syndromes and post-transfusion iron overload.					
No conflict of interest				Syndromes and post-transfusion non overload.					

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(x10 ³ cells/µL)	(10-800)							
GGT	44		CONCLUSIONS					
	(10-134)	0.047	\circ Our data is suggesting that liver stiffness measured					
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(IU/L) ALT	(12-49) 24			level, GGT and platelets.				
ALI (IU/L)			 Further investigation is needed in order to explore the role of TE for the assessment of chelation 					
Bilirubin								
(mg/dL) (0.26-2.5)		0.637		therapy on liver fibrosis in patients with MDS				
No conflict of interest				syndromes and post-transfusion iron overload.				

are malignancies blood cell



