P675

ECHO COLOR DOPPLER EVALUATION OF SPLANCHNIC HEMODYNAMIC DURING ACUTE HEART FAILURE

Ricco" B.[1]; Sacchi A.[2]; Galassi A.[2]; Messora R.[1]; Bertolotti M.[2]; Pinelli G.[1]; Turrini F.[1]

[1]Azienda Ospedaliero Universitaria, Modena, Italy
[2]Unit of Geriatrics - Department of Internal Medicine, Endocrinology, Metabolism and Geriatrics, Modena, Italy

BACKGROUND: Acute heart failure (AHF) seems to provoke profound derangement of abdominal hemodynamic, which causes symptoms and impacts on renal function.

METHODS: 27 patients (10 F - age 78 - EF 0.39) admitted for AHF underwent cardiac and abdominal ultrasound at day 1 and 5. Arterial and venous flow within liver, spleen and kidney were recorded. Portal and Splenic Vein flow was described as continuous, pulsatile or reversed, whereas hepatic vein systolic and diastolic ratio was measured. Renal Venous Doppler Profile (VDP) was classified as: continuous, pulsatile, biphasic or monophasic. Arterial Resistive Index (RI) ≥0.7 was considered elevated.

OUTCOME: At day 1 most patients presented with some degree of deranged VDP and high RI in all examined organs. At day 5, a significant proportion of patients improved their VDP in Liver, Kidney and Spleen, while the percentage of patients with collapsing IVC did not significantly change. On the arterial side, the proportion of patients with high Hepatic RI dropped significantly.

CONCLUSIONS: Our preliminary data show that most deranged VDP in abdominal organs and Hepatic RI improve after decongestion despite a nonsignificant trend in improvement in IVC profile.

RESULTS

	Classification	day 1	day 5	p
IVC	Collapsing	24%	34%	ns
Portal Vein	Continous	22%	50%	
	Pulsatile	72%	50%	
	Reversed	6%	0%	<.05*
Hepatic Vein	S/D≥1	24%	59%	
	S/D <1	60%	28%	
	Reversed S	16%	14%	<.05*
Hepatic Artery	RI ≥0.7	87%	36%	<.05
Splenic Vein	Flat	28%	57%	
	Pulsatile	56%	33%	
	Reversed	16%	10%	<.05*
Splenic Artery	RI ≥ 0.7	52%	48%	ns
Renal Vein	Continous	11%	39%	
	Pulsatile/Biphasic	52%	52%	
	Monophasic	37%	9%	<.05*
Renal Artery	RI ≥0.7	63%	65%	ns

* Refers to normal profile versus all other deranged profiles