

Supplementary material

Świątczak M, Sikorska K, Raczak G, Daniłowicz-Szymanowicz L. Nonroutine use of 2-dimensional speckle tracking echocardiography and fatigue assessment to monitor the effects of therapeutic venesections in a patient with newly diagnosed hereditary hemochromatosis. Kardiol Pol. 2020; 78: 786-787. doi:10.33963/KP.15357

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	Initial values	After 1st venesection	After 2nd venesection	After 3rd venesection	After 4th venesection	After 5th venesection	After 6th venesection
Ferritin (ng/ml)	663	527	431	355	322	211	175
Iron (mcg/dl)	178	130	188	138	122	232	161
Hemoglobin (mg/dl)	14.8	14.9	14.9	14	13.6	15	15.7
Hematocrit (%)	45.2	45.5	44.5	42	-	-	46.8

Table S1. Changes in iron parameters during 6 months of venesection therapy.

Parameter	First examination	After 6 months of treatment
BSA (m²)	1.96	1.96
BP (mmHg)	114/74	120/80
HR (bpm)	65	70
LADs (mm)	38	38
LAA index (cm²/BSA)	19	19
LAV index (mL/BSA)	22	23
IVS (mm)	11	11
LVEDd (mm)	48	48
LVESd (mm)	23	29
LVM index (g/BSA)	93	89
LVEF (%)	63	62
E/A	1.25	1.21
Em (m/s)	0.13	0.15
E/E'	5.1	5.3
S' RV (m/s)	0.14	0.15
TAPSE (mm)	24	25
RV GLS (%)	-25	-25
LV basal rotation (°)	-2	-7.4
LV apical rotation (°)	8.8	13.2
Peak LV twisting rate (°/s)	63	123

Peak LV untwisting rate (°/s)	-55	-162
Twist (°)	8.9	25
LV torsion (°/cm)	0.9	3.0
LV GLS (%)	-18.7	-18.8

Table S2. Comparison of standard and 2D STE echocardiographic parameters at the beginning and after 6 months of venesection therapy. Abbreviations: BSA – body surface area; BP – blood pressure; HR – heart rate; LADs – left atrium end-systolic dimension; LAA – left atrial area (LAA index – LAA/BSA); LAV – left atrium volume (LAV index – LAV/BSA); IVS – intraventricular septum; LVEDd – left ventricular end-diastolic diameter; LVESd – left ventricular end-systolic diameter; LVM – left ventricle mass (LVM index – LVM/BSA); LVEF – left ventricular ejection fraction; E/A – mitral valve early filling/mitral valve atrial filling; Em – the early diastolic myocardial peak velocity; E – the early filling velocity; E’ – the early relaxation tissue velocity; RV – right ventricle; S’ RV – tricuspid annulus systolic velocity; TAPSE – tricuspid annular plane systolic excursion; GLS – global longitudinal strain; LV – left ventricle

	1st venesection n		2nd venesection n		3rd venesection n		4th venesection n		5th venesection n		6th venesection n	
	Fatigue Assessment Scale (FAS)											
	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er
Summa ry	25	26	22	23	19	19	20	16	17	12	19	17
	Chalder Fatigue Scale (CFQ)											
	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er
Summa ry	12	14	12	5	2	6	4	1	6	1	8	5
	Fatigue Severity Scale (FSS)											
	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er	Befo re	Aft er
Summa ry	37	46	38	31	20	24	22	14	35	12	32	13

Table S3. Changes in the severity of fatigue during 6 months of venesection therapy. Fatigue Assessment Scale (FAS) assesses the overall fatigue; Chalder Fatigue Scale (CFQ) assesses fatigue in the last month; Fatigue Severity Scale (FSS) assesses the degree of fatigue in the last week. The higher the number of points obtained in each of the scales, the higher the level of fatigue is. The maximum number of points in FAS is 55, in CFQ 33 (Linkert scoring

method), in FSS 63. The use of these 3 scales in one patient allows for a more objective evaluation of fatigue, questions contained in the scales allow for assessment of both physical and mental fatigue. In fatigue assessment, a gradual improvement was observed in all of the scales (in FAS reduction from 25 to 17, in CFQ from 12 to 5, in FSS from 37 to 13 points) with the most spectacular effect after the 4th venesection.