

# CORRELATION BETWEEN SLEEP APNEA SYNDROME AND HEART FAILURE DEPENDING ON EJECTION FRACTION

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**Key words:** sleep apnea, heart failure, comorbidities

## OBJECTIVES

The aim of this study was to analyze the correlations between sleep apnea syndrome(SAS) and heart failure(HF) in patients with preserved or reduced ejection fraction(EF).

## MATERIALS AND METHODS

We evaluated 51 patients with suspected SAS and HF in sleep lab in Timișoara.

General data was collected using sleep questionnaires, anthropometric measurements, somnography for apnea-hypopnea index, oxygen desaturation index, echocardiographic data, comorbidities and lab tests.

## RESULTS

Creatinine -1.1±0.2 vs 1.4±0.7, p=0.05; stroke-23% vs 4%, p=0.04; aortic insufficiency-11.5% vs 36%, p=0.04; tricuspid insufficiency-46.1% vs 80%, p=0.01.

Differences between groups regarding anthropometric measurements, somnographic index, lipidic profile were not statistically significant..

## CONCLUSIONS

Patients with SAS-IC with preserved EF have a higher risk of stroke events.

Patients with IC with EF<50% had a significantly increased risk of developing a life-long chronic kidney disease. The SAS-IC population with low EF is at a higher risk of developing aortic and tricuspid insufficiency.

	EF<50%	EF>50%	
Paraclinic data	Mean value ± standard deviation	Mean value ± standard deviation	P value
Erythrocyte sedimentation rate mg/dl	21.5±24.3	14.4±9	0.21
Uric acid mg/dl	7.4±2.8	6.6±1.8	0.36
Creatinine mg/dl	1.4±0.7	1.1±0.2	0.05
Erythrocytes (*10 <sup>6</sup> /μl)	4.9±0.9	4.8±0.5	0.8
Colesterol mg/dl	164.7±38.4	164.7±54.2	0.9
LDL mg/dl	94.1±29	79.1±25.3	0.15
HDL mg/dl	42.4±10.7	41.9±10.4	0.88
Triglycerides mg/dl	133.5±81.6	191.4±105.6	0.06

## REFERENCES

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