

## ***How can we assess haemodynamic profile non-invasively? Evaluation of alterations in the cardiovascular system using examination with CNAP device in patients with cirrhosis.***

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### ***Abstract***

Cirrhotic cardiomyopathy (CCM) is a condition concerning heart muscle dysfunction in patients with cirrhosis. Cirrhosis leads to the development of a hyper dynamic syndrome, manifested by high cardiac output, increased heart rate and effective arterial blood volume, accompanied by reduced total systemic vascular resistance. Continuous Noninvasive Arterial Pressure (CNAP) device assess patient's haemodynamic profile in a non-invasive way. The results acquired from CNAP are highly accurate and precise compared to the invasive methods.

To screen patients with cirrhosis, which may lead to earlier diagnosing CCM and hyper dynamic syndrome.

The study included 70 patients over 18 years old, with cirrhosis, caused by alcohol ([ALD],22), autoimmune(26), viral(9) other reasons(13), qualified for liver transplantation. We disqualified patients with a history of cardiovascular diseases. Each patient had a 6-minute walking test (6MWT) done and hemodynamic monitoring using CNAP device. Results Patients differ between etiologies of liver diseases. Median NTproBNP level was highest in ALD group (253pg/ml) and viral group (177,5 pg/ul) compared to autoimmune group(51 pg/ul) and other(114 pg/ml). Median QTc interval was more prolonged in patients with viral aetiology(456ms) and ALD aetiology(441ms) than autoimmune etiology(422ms) and other etiology(431ms). Highest median CO was observed in viral group(6L/min) and ALD group(5,7L/min). Median SVRI was lowest in viral group(1700 dyn- s/cm-5/m2) and ALD group(1888 dyn- s/cm-5/m2) and higher in autoimmune group(2067 dyn- s/cm-5/m2) and other group(2432 dyn- s/cm-5/m2).

### ***Biography:***

Aleksandra Bodys-Pelka graduated from medical studies in 2019. She is the author of several publications in reputed journals. She has participated in lots of conferences on an international scale

### ***Speaker Publications:***

1. "The value of chosen diagnostic tools in evaluating myocarditis in children and adolescents"
2. "H2AX foci in late S/G2- and M-phase cells after hydroxyurea- and aphidicolin-induced DNA replication stress in Vicia"
3. "Comparison of different oral anticoagulant regimens in patients with atrial fibrillation undergoing ablation or cardioversion"
4. "Cirrhotic cardiomyopathy in the pre- and post-liver transplantation phase"

[2<sup>nd</sup> Middle East Heart Congress](#); Webinar - June 23, 2020.

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