# Comments on "Risk Factors for Left Ventricle Enlargement in Children With Frequent Ventricular Premature Complexes" by Bo Chen et al, June 2020

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2.44, and 2.74, respectively).[2] Interestingly in our results, high-risk behavior was only significant after adjusting for multiple variables, indicating the importance of further examination of the role of gender, education, income, and other factors that may drive this association.

Our results should be interpreted in the context of potential limitations, including the self-reporting of SU, which can generate recall bias. Furthermore, we did not assess the association between the frequency of SU and premature ASCVD.

In conclusion, the use of e-cigarette, cigarette, ST, marijuana, and high-risk behavior are associated with higher rates of premature ASCVD and need to be specifically addressed alongside traditional metabolic risk factors in order to mitigate the rates of ASCVD in this patient population.

## Disclosures

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## Comments on "Risk Factors for Left Ventricle Enlargement in Children With Frequent Ventricular Premature Complexes" by Bo Chen et al, June 2020

With interest we have read the article of Bo Chen et al., "Risk Factors for Left Ventricle Enlargement in Children With Frequent Ventricular Premature Complexes", in the American Journal of Cardiology in June 2020. The authors describe a series of pediatric patients with frequent ventricular premature complexes (VPC) with or without asymptomatic ventricular tachycardia (VT). Data regarding frequent VPCs and VTs in pediatric patients is scarce, therefore new data on this subject is potentially very valuable. However, we were surprised about the methods the authors use, the data they presented and the conclusions that were drawn.

One of the main conclusions of the authors is that a right bundle branch block (RBBB) is associated with having an enlarged left ventricle (LV), with an unrealistic high OR of 167.8 presented in table 3. In table 2 the authors present the data on which this conclusion is based, and show that out of 29 patients with an left ventricular enlargement 11 had a RBBB morphology of the VPC and zero had a LBBB morphology. Furthermore, out of the 220 patients without left ventricular enlargement, only 2 had an RBBB morphology and zero a LBBB morphology. This implicates that of the entire cohort 13 patients have an RBBB morphology and the remaining 238 PVC patients have neither a LBBB morphology or other QRS morphologies, which is of course not possible Therefore, it is impossible to draw the conclusion that RBBB is associated with left ventricular enlargement, based on these data.

The other conclusion that is drawn, is that a PVC burden of > 20% is associated with LV enlargement with again an incredible high OR of 132.624 in table 2 and an even higher OR in the text, an OR of 632.1. This raises serious questions about the statistics the authors use.

The next conclusion that the authors present is that frequent VPCs can induce prominent enlargement or LV dysfunction in children. And that LV enlargement is reversible after catheter ablation or medication. In the methods section the authors do describe that the patients were treated with medication and if they were not responsive to antiarrhythmic drugs, an ablation was performed. But they do not present any data of treatment or follow-up in the result section. How were these children followed and treated? What were the results of the ablation? What was the improvement in LV dimensions? In the discussion the authors draw a firm conclusion, but based on what data?

One of the key elements of the study is that children with more than 5% VPC with or without asymptomatic VTs were included. The authors continue to describe that children were divided in two group based on a normal or larger than normal LV end-diastolic dimension for this age group. But they do not define what is larger than normal? What cut-off did they use?

In the method section the authors give a definition of a VT, 3 or more consecutive VPCs and < 30 sec. But this is the widely accepted definition of a non-sustained VT. This raises the question what kind of VTs the authors are talking about in the article.

In 2017 we wrote an article about this subject: "Left ventricular dysfunction is associated with frequent premature ventricular complexes and asymptomatic ventricular tachycardia in children", published in Europace 2017. We discovered striking similarities between our article and the article of Bo Chen et al.

For example in the introduction:

Bertels et al. 2017

*Frequent idiopathic premature ventricular contractions (PVCs) and asymptomatic ventricular tachycardias (VTs) in children and young adults are rare, especially in the first decade.1,2 In older children and young adults, the incidence increases,3 although exact*

*numbers are unknown since most patients are asymptomatic. Idiopathic frequent PVCs were always considered benign in all age groups.1 However, over the past decade, frequent PVCs have emerged as a cause of left ventricular (LV) dysfunction, LV dilatation, congestive heart failure, and even sudden cardiac death in the adult population.4,5 Paediatric data on PVCs in relation to LV dysfunction are limited.*

*Current guidelines recommend anti-arrhythmic drug therapy or catheter ablation as treatment options for children and adults with symptomatic PVCs/VTs and fast non-sustained ventricular tachycardia (nsVT).17,18 However, especially in the paediatric population, data are lacking to justify treatment of frequent PVCs/VTs in asymptomatic patients to prevent LV dysfunction. This study aims to assess which determinants of asymptomatic PVCs/VTs are associated with development of LV dysfunction in children.*

Introduction Bo Chen et al. 2020

*Ventricular premature complexes (VPC), one of the most common arrhythmias, occur in patients with heart abnormalities as well as in healthy patients.1,2 In recent years, the incidence has increased significantly in children.3 Idiopathic frequent VPC were always considered benign.1 However, recent studies in adult have showed that the burden of frequent VPC might be a key factor for left ventricular (LV) dysfunction, LV dilatation and even congestive heart failure.4−9 The relation between VPC and LV dysfunction or structural changes are still unclear in children.*

*The current guidelines of the European Society of Cardiology recommend anti-arrhythmic drug therapy or catheter ablation as a treatment option for children with symptomatic VPC /VT and rapid nonsustained VT (nsVT).10−12 Nevertheless, particularly in children, the data regarding treatment of frequent VPC /VTs to prevent LV dysfunction in asymptomatic patients is still lacking. In our study, we aimed to evaluate the risk factors for LV enlargement and dysfunction in asymptomatic children with frequent VPC.*

In the introduction, even most of the references are the same, 6 out of 7 references are exactly the same. Furthermore, 18 of the article's total of 24 references are the same as in our article.

Another example in the Method section:

Bertels et al. 2017

*Mapping was facilitated by an electroanatomical mapping system (CARTO, Biosense Webster, USA) using a transvenous or retrograde aortic approach. At the site of the earliest activation based on the onset of bipolar electrogram, reversed polarity in the bipolar electrogram, and/or a QS-wave configuration in the unipolar electrogram, pace-mapping was performed to confirm a ≥11/12 lead QRS pace match. Radiofrequency energy was delivered using a Navistar Thermocool unidirectional catheter (Biosense Webster) with a maximum target temperature of 60°C and a power output of 30−60W depending on age, weight, and focus.*

Bo Chen et al. 2020

*Mapping was facilitated by an electroanatomical mapping system (CARTO, Biosense Webster, USA) using a transvenous or retrograde aortic approach. At the site of the earliest activation based on the onset and reversed polarity in the bipolar electrogram and/or QS-wave configuration in the unipolar electrogram, pace-mapping was performed to confirm the ≥11/12 lead QRS pace match. Radiofrequency energy was delivered with a maximum target temperature of 60°C and power output of 30 to 60 W depending on age, weight, and focus.*

Yet another example in the discussion:

Bertels et al. 2017

*Idiopathic frequent PVCs are generally regarded as a benign condition, and in the majority of patients with frequent PVCs, cardiac function remains preserved during follow-up. However, studies in adults have shown a causal relationship between frequent PVCs and LV dysfunction and improvement of LV function after effective treatment of the PVC burden.19 − 21*

Bo Chen et al. 2020

*Idiopathic frequent VPC are usually considered benign, and in most patients with frequent VPC, the cardiac function is preserved during follow-up. But the result from an adult study suggested that a causal link between frequent VPC and LV dysfunction and improvement in LV function, after an treatment reducing VPC burden effectively.13,14*

Again, even the same refences are used.

Considering all the points we have raised in this letter, questions about the definitions used, questions about the reliability of the data, questions about the conclusions that were drawn and the clear examples of plagiarism, the editors should seriously consider to withdraw this paper.

## Disclosures

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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## Anisocytosis Is Associated With Reduced Bone Marrow Activity Evaluated by Positron Emission Tomography

Anisocytosis or increased red blood cell distribution width (RDW) has been associated with an elevated cardiovascular risk, especially in patients with coronary artery disease and heart failure.[1,2] Anisocytosis has been linked with markers of systemic inflammation, oxidative stress, and iron metabolism.[3] However, the mechanism linking RDW with cardiovascular outcomes remains unknown. We assessed the association of vascular, bone marrow, and spleen positron emission tomography (PET) imaging variables with RDW.

This is a prospectively enrolled, cross-sectional study, in adults with and without heroin use who underwent 18-FDG PET imaging to measure aortic, bone marrow and spleen activation, and blood draw for soluble inflammation markers and cellular markers of monocyte and T-cell activation. Briefly, all participants fasted for a minimum of 8 hours before PET scan. The images

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