Reviewer's report

Title: Left atrial volume index and aortic stiffness index in adult hemodialyzed patients - link between compliance and pressure mediated by endothelium dysfunction; a cross-sectional study

Version: 2 Date: 2 July 2012

Reviewer: Wiktoria Wpjiechowska

Reviewer's report:

Major Compulsory Revisions

1. The aim of the study was to investigate relation between the index of left atrium volume and the properties of aorta, which means the influence of aorta stiffening processes on size of left atrium in hemodialysed patients. Volume and pressure overload of left ventricle contributes to enlargement of left atrium in those patients. Thus correlation between LAVI and ASI is not surprising. However it would be much more interesting to investigate whether ASI still predict LAVI after adjustments for other significant covariables like NT-pro BNB, ADMA, cTnT etc.

2. In clinical characteristics authors did not provide any information about hypertension prevalence in studied groups. There is also important to analyze whether hypertension influenced the relation between LAVI and ASI.

3. In methodology section, authors did not provide information about ASI methodology.

4. In introduction section (3 paragraph) authors state, that aortic stiffness is independent of blood pressure – it have to be checked.

Minor Essential Revisions

1. In abstract, the last sentence of the result section is unclear.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests