Reviewer's report

Title: Effect of Volume Expansion with Hypertonic- and Isotonic Saline and Isotonic Glucose on Sodium and Water Transport in the Principal Cells in the Kidney.

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Reviewer: Giovanna Valenti

Reviewer's report:

In this ms Jensen and co-workers evaluated the effects of acute volume load with isotonic saline, hypertonic saline and glucose on urinary AQP2, urinary ENaC and in healthy humans. The main conclusion is that water and sodium transports are modulated through AQP2 as well as epithelial sodium channels during all three types of volume of to regulate to regulate sodium and water homeostasis. This is an important topic and the paper is concise clear and easily readable.

Minor:
As the authors recruited male and female in the study it would be interesting to know whether there is a gender-specific effect of volume load on the AQP2 and sodium channels modulation. This is particularly interesting in view of the recent literature in the field.

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'