

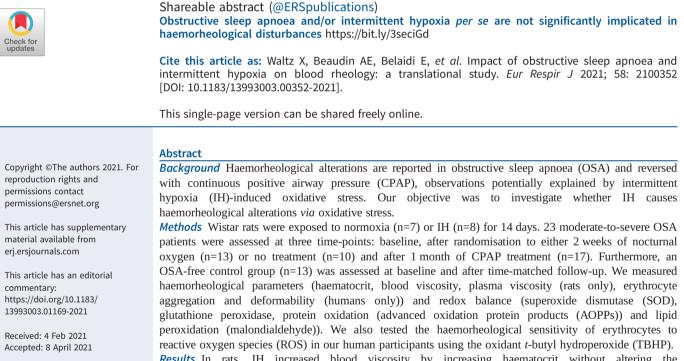


Impact of obstructive sleep apnoea and intermittent hypoxia on blood rheology: a translational study

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Results In rats, IH increased blood viscosity by increasing haematocrit without altering the haemorheological properties of erythrocytes. IH also reduced SOD activity and increased AOPPs. In humans, baseline haemorheological properties were similar between patients and control participants, and properties were unaltered following oxygen and CPAP, except erythrocyte deformability was reduced following oxygen therapy. Redox balance was comparable between patients and control participants. At baseline, TBHP induced a greater reduction of erythrocyte deformability in patients while CPAP reduced TBHP-induced increase in aggregation strength.

Conclusions IH and OSA *per se* do not cause haemorheological alterations despite the presence of oxidative stress or higher sensitivity to ROS, respectively.