THE ADMINISTRATION OF EXTRACELLULAR VESICLES DERIVED FROM MESENCHYMAL STEM CELLS PROMOTED SIGNIFICANT RENOPROTECTION IN A SEVERE EXPERIMENTAL CKD MODEL

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INTRODUCTION

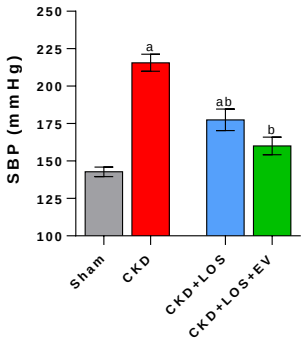
CKD is an important health issue worldwide. The administration of mesenchymal stem cells (mSC) to control inflammation, renal fibrosis and CKD progression has shown promising results in experimental and preclinical studies. The beneficial effects achieved by mSC administration likely derive from the paracrine effect of signaling factors, released by these cells through the secretion of extracellular vesicles (EV).

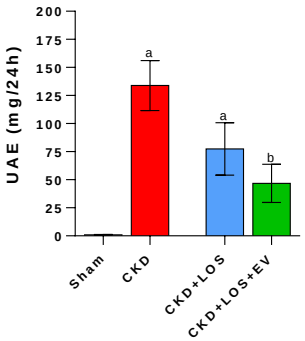
AIM

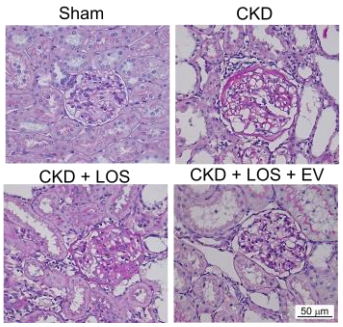
The aim of this study was to analyze the renoprotective effects of EVs derived from mSC, associated to the oral treatment with Losartan, in rats subjected to a severe CKD model.

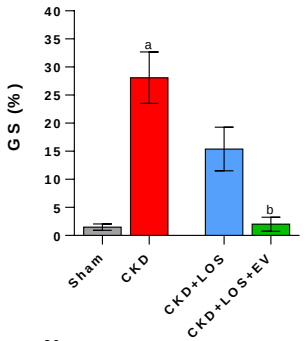
RESULTS

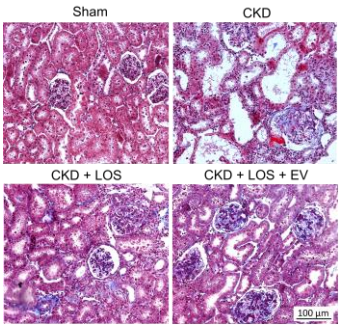
Data was presented as Mean ± SE. For One-way ANOVA statistical analysis **a:** p<0.05 vs. Sham, **b:** p<0.05 vs. CKD and **c:** p<0.05 vs. CKD+LOS

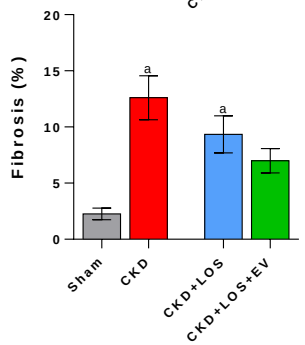




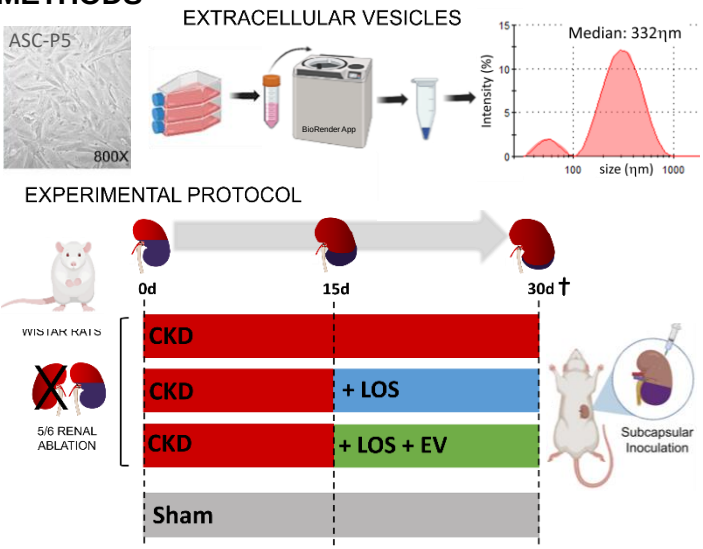


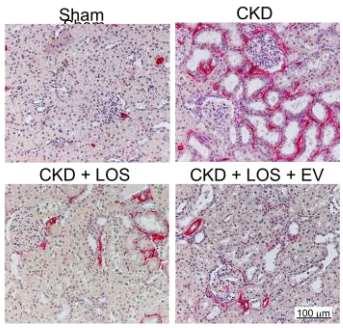


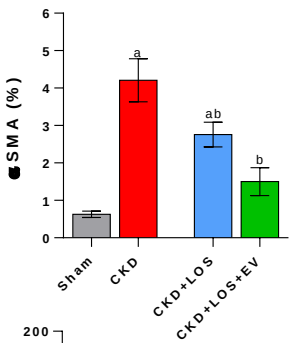


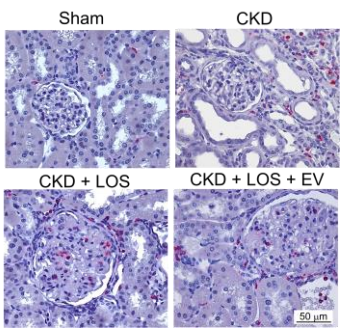


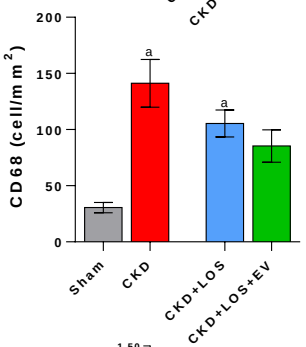
METHODS

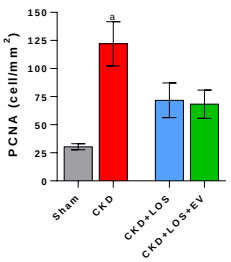


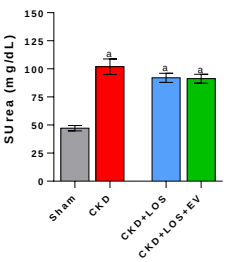


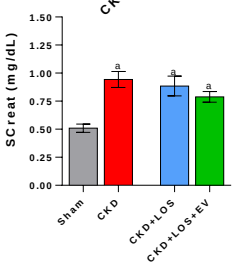












CONCLUSIONS

According to our results, local EV application promoted additional renoprotective effects in reducing SBP, UAE, renal inflammation and fibrosis in the 5/6 renal ablation model, compared to LOS alone, suggesting that experimental EV therapy could be associated to the current pharmacological treatments to detain CKD.