Correction to: Stationary and Nonstationary Ion and Water Flux Interactions in Kidney Proximal Tubule: Mathematical Analysis of Isosmotic Transport by a Minimalistic Model

Erik Hviid Larsen and Jens Nørkær Sørensen

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Further, in Fig. 7e the left-hand side axis label was published incorrectly as being p^{cell} (Atm) instead of the correct label of p^{lis} (Atm). This has now been corrected.

The updated Fig. 7 is shown below.

Fig. 7 (a–f) Time course of physiological variables in response to “eliminating” osmotic permeability of apical membrane. At time = 2 s and governed by $\tau = 1$ s, P_f^{am} was reduced exponentially from 4,490 to 0.449 $\mu\text{m s}^{-1}$. (a) this results in a fast shift of water volume from cells to *lis*. (b) C_{Na}^{cell} increases transiently, which stimulates Na^+ pump flux, $J_{Na}^{pump,lm}$. (c) While the transient increase in C_{Cl}^{cell} parallels the transient increase in C_{Na}^{cell} , the increase in concentration of nondiffusible anions is closely following the loss of cell volume. (d) The water flux is redirected from being translateral to being paracellular driven by the increased osmolarity of *lis* governed by the C_{Na}^{cell} -stimulated increase in $J_{Na}^{pump,lm}$. (e) Due to inflow of water, the hydrostatic pressure of *lis* increases, which drives the volume flux across the interspace basement membrane J_V^{ibm} . (f) The final result is a significant increase in osmolarity of the fluid emerging from *lis* due to convection-electrodiffusion of solutes across the interspace basement membrane (Eq. 6). Notably, at the new steady state, the transepithelial water flux is about the same as the water flux prior to eliminating P_f^{am} (35.5 versus 34.0 $\text{nL cm}^{-2} \text{s}^{-1}$)