

3rd International Conference on Nephrology & Therapeutics

June 26-27, 2014 Valencia Conference Centre, Valencia, Spain

Water renal handling alteration in HIV stable patients

Carlos G. Musso

Hospital Italiano de Buenos Aires, Argentina

Since hyponatremia is a frequent electrolyte disorder in admitted HIV patients, we decided to evaluate water renal handling in stable HIV patients who had neither renal disease, nor electrolyte disorder, nor dysnatremia inducing drugs. For this objective, we prospectively performed water handling renal physiological test in a group of volunteers (healthy and HIV positive ones) who had the above mentioned characteristics.

Material & Methods: Water restriction test, and hyposaline infusion test were performed in 20 HIV positive volunteers under anti-retroviral treatment (with tenofovir or not) who had normal renal functional parameters, and no dysnatremia inducing drugs. The control people were 10 healthy young volunteers. Statistical analysis was performed applying Mann-Whitney Wilcoxon Rank Sum and Kruskal-Wallis, and Wilcoxon Signed Rank tests.

Results: We found that HIV patients were not able to neither adequately concentrate (urine osmolarity: HIV: 520 ± 150 mOsm/l vs. healthy controls: 900 ± 100 mOsm/l) nor dilute urine (urine osmolarity: HIV: 170 ± 18 mOsm/l vs. healthy controls: 40 ± 10 mOsm/l) in setting of a water restriction (12 hour-water restriction) and water overload (hyposaline infusion) respectively. Moreover, all these findings were consistent regardless of the presence or not of anti-retroviral therapy.

Conclusion: We documented that urine dilution-concentration capability were reduced in stable HIV patients despite they were on treated or not with anti-retroviral drugs.

Biography

Carlos G. Musso has completed his PhD in the University of Salamanca (Spain), and he has published more than 100 articles in his research field, renal physiology and renal senescence. He is also Editorial Board member in 12 international journals of repute.

carlos.musso@hospitalitaliano.org.ar