International Conference on

Ophthalmic and Oculoplastic Surgery

May 24-25, 2018   Osaka, Japan

The effect of dialysis for renal failure on the visual performance

Nuha Mohamed Fath Elrahman and Akhair Ahmed
Al-Neelain University, Sudan

Aim: The study was design to be a comparative cross-sectional study. It was aimed to assess the effect of renal failure on visual performance (visual acuity, color vision and contrast sensitivity) and to compare the visual function pre and post dialysis.

Material & Methods: The study was done at Military Hospital in Omdurman, Sudan. 90 patients were screened for selection; every patient was tested pre and post dialysis directly for visual acuity, refraction, color vision and contrast sensitivity.

Results: A total number of 30 patients (60 eyes) were found to fulfill the criteria of selection (50% males and 50% female) their ages were ranged from 20-45 years with mean of 33.46±7.22 years. Their pre dialysis un-aided visual acuity was ranged from 0.06 to1.00 with mean of 0.78±0.31and post dialysis was ranged from 0.06 to1.00 with mean of 0.82±0.31. Paired sample t-test showed no significant differences between unaided vision of the patients pre and post dialysis df 59, t -1.8, P value 0.062. The visual acuity pre dialysis was ranged from 0.3 to 1.00 with mean of 0.83±0.25 and post dialysis from 0.3-1.00 with mean of 0.86±0.23 paired sample t-test revealed insignificant differences. Contrast sensitivity pre dialysis was ranges from 1.70 to 1.85 with mean of 1.83±0.03 and post dialysis ranged from 1.75 to 1.85 with mean of 1.84±0.02. Paired sample t-test yields no significant differences between the contrast sensitivity of the patients pre and post dialysis df 59, t-1.0 P value 0.289. All the patients had normal color vision pre and post dialysis.

Conclusion: The study revealed that dialysis enhanced visual acuity and contrast sensitivity although the differences were not significant as shown with paired sample t-test.

nuhafath@windowslive.com