Mental wellness and cognitive function in patients with stage 5 chronic kidney disease and hemodialysis

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Objectives. The aim is to evaluate the cognitive function and mental wellbeing of patients with stage 5 chronic kidney disease (CKD) on hemodialysis (HD) depending on co-morbidities and lifestyle.

Materials and Methods.

This study includes 26 patients with stage 5 CKD ongoing HD at Pauls Stradiņš' Clinical University Hospital or Ogre Regional Hospital. The interview about lifestyle were done for each patient. The mental wellness was evaluated using the Depression Anxiety Stress Scale 21 (DASS21), cognitive function was determined using the Montreal Cognitive Assessment (MoCA). Data about medical history were collected and analysed by IBM SPSS programme.

Results.

26 patients were analyzed. The mean score of the MoCA was 25.31 (+/-SD 2.695). 52% of all participants have a normal DASS21 depression level and there is a correlation between low physical activity and depression (p=0.004). 54% of participants claimed to have sleeping problems. A tendency between better MoCA score and more sleeping hours has been noticed (p=0.083). Alcohol consumption has a significant association with higher MoCA score (p=0.007). No significant correlations were noticed between MoCA and DASS 21 scores, as well as no significance comparing results to HD duration and other factors.

Conclusions.

Higher MoCA score and better mental wellness could be explained by greater overall condition, activity and the ability of fluid intake but further evaluation is needed.