P033 Cognitive function in patients undergoing radical prostatectomy

EUR Urol Suppl 2019;18(11):e3453

Brzoszczyk B.[1], Jarzemski P.[1], Popiołek A.[2], Stachowicz-Karpińska A.[2], Gołota S.[2], Bieliński M.[2], Borkowska A.[2]

[1]Jan Biziel University Hospital, Dept.of Urology , Bydgoszcz, Poland, [2]Nicolaus Copernicus University in Toruń, Dept. of Clinical Neuropsychology, Bydgoszcz, Poland

Introduction & Objectives: Prostate cancer (PCa) and radical treatment for PCa have an adverse impact on physical and mental well-being, and are associated with decreased quality of life. The aim of the present study was to examine the relationship between neuropsychological symptoms and clinical course in PC patients undergoing radical prostatectomy.

Materials & Methods: The cohort comprised 100 patients aged 50–77 years who underwent radical, laparoscopic prostatectomy for PCa. Twenty-three patients with a more advanced clinical stage also received adjuvant therapy (radiotherapy and hormonotherapy). Clinical evaluation included self-report assessment, physical examination, and biochemical tests (testosterone and prostate-specific antigen). In addition, the presence and intensity of cognitive dysfunction, sexual dysfunction, urinary dysfunction, anxiety-depressive symptoms were assessed using neuropsychiatric validated tests.

Results: The group of patients undergoing complex therapy was characterized by a significantly worse result of deferred memory (p=0.04). A significant correlation was found between post-surgery erectile function and scores for the visual working memory test (correct answers; VWMT-C; p=0.006) and Hospital Anxiety and Depression Scale depression (p=0.045) and anxiety scores (p=0.02). A trend toward significance was also observed for simple reaction time (correct answers; p=0.09). A significant correlation was found between results for the delayed verbal memory test and all physical symptoms (International Consultation on Incontinence Questionnaire-total, p=0.02; International Index of Erectile Function-5, p=0.006). Similarly, a significant correlation was found between the VWMT-C and score for sexual dysfunction (p=0.003).

Conclusions: Patients undergoing both surgical therapy for PCa are at risk for cognitive disorders. In the present cohort, physical complications of therapy were associated with depression, anxiety, and delayed memory dysfunction. Fewer complications after surgery are associated with better psychological and cognitive functioning.