BANTAO Journal 3 (2): p 49; 2005

Appearance of Psychopathological Tendencies in the Early Phase of Haemodialysis Treated Patients

D. Mladenovska, K. Zafirovska, N. Petrusevska, Gj. Selim, L. Trajceska
Department of Nephrology, Clinical Centre, University "St.Cyril and Methodius", Skopje, Republic of Macedonia

Introduction

Haemodialysis (HD) treatment initiation for every patient is a huge psychological stress especially when the disease comes suddenly. In addition to the usual coping issues of persons in relationship to their disease, patients exhibit a number of well-defined psychopathological manifestations. Psychological status of the patients during the early HD treatment may significantly affect the forthcoming development of the disease and is responsible for the increased risks of morality as well(1).
Previous studies have shown that anxious and depressive neurotic reactions are the most common psychological complications that occur as reaction to the disease and the treatment (2,3).
In the ground resulting out in neurotic reaction lays deep personal conflict between the substantial wishes and necessities of the person on one side, and the external situation on the other side. Neurosis appear as a result of disturbed interaction between the man and the environment i.e. difficulties of accommodation to the objective situation. Any patient starting the treatment by HD shows a conflict between the dependence the treatment is inevitably imposing and the need of independence. Positive attitude will appear towards the dialysis because it extends their life, however, in the same time the negative one because of various limitations and passive position (4).
Literature data suggests different prevalence of depression and anxiety in the early phase of haemodialysis treated patients. Watnick, et al, (2) reported 44% of clinical depression among ESRD patients starting HD therapy.
At the beginning patients have poor information's for their disease and the HD treatment itself that increase anxiousness, the feeling of uncertainty and fear from the development of the disease. It is defined that psychopathological tendencies are mostly emphasized at the beginning of the treatment and in time by the stabilization of the general health status and increased knowledge and information it resulted in accommodation to the treatment and reduction of the psychopathological tendencies. (1,3)
According to the difference in individual reactions, in our study we assessed personality profiles and appearance of psychopathological tendencies in end-stage renal disease (ESRD) patients in the early phase of HD (first 90 days after HD initiation).

Materials and methods

Thirty-one patient (11M, 20F), aged from 21-65 years (mean age 44,9±12,7), all in the early phase of HD, were included in this study. Psychological status of the patient in the early phase was compared with the psychological status of 31 patients with dialysis experience between 3 and 60 months. All patients were psychologically examined by explorative interview, the questionnaire composed of items regarding demographical data as well as certain aspects of life as are family status, employment, socioeconomic status, pre-dialysis clinic attendance. For examination of the psychological profile of the patients and appearance of psychopathological tendencies the Minnesota Multiphasic Personality Inventory- 202 (MMPI-2) (5) was used.
Data were expressed as means+/-SD. Comparisons between groups was made by Student's t test. P-values less than 0,05 were accepted as statistically significant

Results-Discussion

Obtained data indicates that in the early phase of HD treatment, the psychological status in patients with ESRD is changed.
Normal personality profile with presence of mild levels (T score <60) of anxiety and depression was found in 19,3% of patients. This profile correlates with existing pre-dialysis clinic attendance and relatively good information of patients for the disease and treatment by HD.
Neurotic personality profile with clinical significant elevation of the scales of depression, anxiety, hypochondria and hysteria was found in 74,2 % of patients. Most of them started HD when their health was already very seriously damaged and were poorly informed about HD treatment. Neurotic profile correlates with poor information for the disease and treatment with patients whose predialysis status was not regularly or were not at all followed up. Scales of hypochondria (Hs) and hysteria (Hy) had significant elevation however we didn't interpret the same as their increase is in accordance with objective health difficulties of these patients. We identified depression and anxiety as primary complications associated with HD initiation. We also found positive correlation between these two scales in our patients ($r=0,81$, $p<0,01$) thus those more depressive being also more anxious. Deep depression (Tscore >85) with suicidal ideas was evident in two diabetic patients. Diabetic patients were also found to have higher depression and anxiety scores than those without diabetes. Psychotic personality profile was found in two patients (6,5%).
According to the verbal reports of the patients in the early phase of HD treatment they most stressfully experience uncertainty of the forthcoming life, they follow the dependence of the medical technology and environment in general, uncertainty regarding their employment status and how the disease will impact their finances.

Correspondence to: D.Mladenovska, Department of Nephrology, Clinical Centre, University "St.Cyril and Methodius", Skopje, Republic of Macedonia

In an attempt to explain origins of psychopathological tendencies in the early phase of HD treated patients we suggest that depression appears as a reaction of losing one vital function and facing the new way of life that will reduce a series of activities and pleasures by far however not excluding its organic essence. Patients facing a situation they are unable to influence or change are reacting on the principle of "learnt helplessness"(1). Some authors however see depression as a normal step on the path to adaptation, resolving with stable health and longer time on HD (3). Anxiousness is existential and tied to uncertainty and fear from the further development of the disease.

Just to confirm the hypothesis that anxiety and depression are most obvious at the beginning of the treatment and then after adaptation the same will be reduced, patients in the early phase of HD (1st group) were compared to patients experiencing dialysis 3 to 60 months (2nd group) (Table 1).

Table 1. Means ±SD of the most elevated variables in the two groups of patients

Variables	I group HD duration < 3 months	II group HD duration 3-60 months	p value
Hypochondria	71,00±12,03	65,21±8,36	<0,05
Depression	73,34±10,84	70,24±9,63	n.s
Hysteria	70,16±9,42	62,10±9,6	<0,01
Anxiety	71,59±9,33	66,38±7,72	<0,05

We have found that patients of the 1st group are more depressive than the patients of the 2nd group, however there was no statistically significant difference among them (73,34±10,84 v.s 70,24±9,63). Our findings suggest that stress sources impacting the psychological status and appearance of depression with patients of the second group are also numerous. These are stresses connected with the disease and reduced way of life but also financial difficulties (in 64% of cases), unemployment or premature retirement (in 77,4% of cases), and this resulting out in reduced social activities, feeling that they are burden to the family, depression, disillusionment and discouragement. Compared with patients of 2nd group, early phase HD patients had significaly higher anxiety level (71,59±9,33 v.s 66,38±7,72 p<0,05). This finding is in accordance with those of other authors (3) who reported that anxiety decreases by time on dialysis treatment, suggesting a positive adjustment over time.

Conclusions

The study presents that psychotherapeutic intervention is necessary for most of the early phase HD patients. The psychological changes require psychological preparation and applying education and psychological counseling. We conclude that pre-dialysis clinic attendance and good knowledge of all aspects of this disease and the treatment favorably influences patient's emotional status after HD initiation.

Examination of the other factors contributing to psychopathological tendencies appearing with some of the patients will be the subject of future investigations. Future studies needs to assess whether early identification and treatment of depression and anxiety may help to improve quality of life in HD patients.

Working with chronicle kidney patients require multidisciplinary approach aiming to settle a lot of psychological, social and economic difficulties imposed by the disease, implementation of psychological advisory training and education in all stages of the chronicle kidney disease.

References

1. Stankovic M. Depression of haemodilysis patients. In Strahinjic V, Stefanovic V. (ed). Psychonephrology, Nis, *Prosveta* 1989; 90-94
2. Watnick S, Kirwin P, Mahnensmith R. The prevalence and treatment of depression among patients starting dialysis. *American Journal of Kidney Diseases* 2003; 41:105-110
3. Kutner NG, Fair PL, Kutner M. H. Assessing depression and anxiety in chronic dialysis patients. *Journal of Psychosomatic Research* 1985;29:23-31
4. Micev V, Čadlovski G. Psihijatrija: opsta psihopatologija, nevrozi i psihoterapija. Skopje, *Prosvetno delo*, 1994
5. Biro M. Dijagnosticka procena licnosti MMPJ-202. Novi Sad, Futura publikacije i Filozofski fakultet, 1995
6. F. O. Finkelstein and S. H. Finkelstein. Depression in chronic dialysis patients: assessment and treatment. *Nephrol. Dial. Transplant*., 2000;15(12):1911-1913
7. Lopes AA, Bragg J, Young E. Depression as a predictor of mortality and hospitalization among hemodialysis patients in the United States and Europe, *Kidney Int*. 2002;62(1):199-207