

Clinical Factors Associated with Depression in Elderly Hemodialysis Patients

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Introduction :

✓ **Depression** is the most common psychiatric disorder in elderly hemodialysis patients (EHP) and is associated with mortality.

Aim:

➤ The aims of our study were to assess the prevalence of depression in a population of EHP and to identify clinical factors associated with depression among this population.

Methods:

- ❖ A multicenter cross-sectional study.
- ❖ All patients **older than 65 years**, with a **chronic renal failure** undergoing **periodic hemodialysis**.
- ❖ During the month of October 2017, in the cities of Tataouine and Medenine.
- ❖ The data collection was done by a semi-directive interview of the patient and a member of his family.
- ❖ We explored the socio-demographic, clinical and therapeutic characteristics.
- ❖ Three geriatric scales:
 - *The Mini Mental State Examination (MMSE),
 - *The Geriatric Depression Scale (GDS)
 - *Katz Index of Independence in Activities of Daily Living (ADL).

Results

- ❖ Number of patients = 81
- ❖ Mean age = 75.6 years
- ❖ Mean duration of hemodialysis = from 3 months to 24 years

Characteristics	Percentage
Female sex	49.5%
Diabetic nephropathy	58%
Motor disability	35%
Depression	66.7%

TABLE 1: Characteristics of the study population

- ❖ **The degree of independence:** mean scores of ADL = 3.8
- ❖ **Depression:** mean score on the GDS = 13
- ❖ **Cognitive impairment:** mean score of MMSE = 21
- ❖ Depression was significantly associated with: lack of **independence** (p = 0.002), **motor disability** (p <10⁻³), **physical comorbidity** (p = 0.003) and **cognitive impairment** (p <10⁻³).

Discussion

- ❖ Depression is the most common psychiatric complication of hemodialysis[1].
- ❖ In the dialysis population, recent studies have shown a high prevalence of depressive syndromes in the elderly, from 44% at the **initiation of dialysis** and close to 20% **during dialysis**[2,3]
- ❖ Thus, **the months before and after the initiation of extra-renal purification** constitute a period at risk of depression[3].
- ❖ In our study, depression was noted in 54 patients(66.7%) This prevalence is significantly higher than that found in the general population and in patients with other somatic conditions[4].

- ❖ It has been established that depressive disorders have a prevalence that varies between 10% and 50% depending on the studies[4].
- ❖ This variation in the prevalence of depression in the elderly hemodialysed person would be related to the use of different methodologies.
- ❖ In addition, the assessment of somatic symptoms of depression is particularly difficult in patients with chronic renal insufficiency, as they may be related to uremic symptoms[5]
- ❖ In our study, the average age found was 77.6 years. Studies carried out among elderly hemodialysis patients, whether Tunisian or international, do not show any correlation between a specific age group and the occurrence of depression.
- ❖ In our study, 92.9% of patients with a motor disability were depressed with a statistically significant association between the presence of a motor disability and the occurrence of depression. In Dr. Nasr's study, hemodialysis patients over 60 years of age had the lowest autonomy scores compared to subjects in the younger age groups[6]. This result, comparable to that of the literature, would be explained by the deterioration in physical health and the decline in general adaptive capacities. This limitation of physical capacities in elderly hemodialysed subjects could be explained essentially by the following factors: limited duration of dialysis, anaemia, undernutrition, sedentary lifestyle and musculoskeletal disorders[6]. However, the absence of degradation of the psychic component with age could indicate a psychological tolerance of elderly subjects towards the constraints of dialysis, despite their more precarious physical state[7].
- ❖ All our dependent patients were depressed with a significant association (p=0.002). According to the study by Cukor et al, the presence of depressive disorders is associated with a lower quality of life in patients on hemodialysis[8].
- ❖ In our study, 70% of patients had cognitive problems. A statistically significant association was found between the occurrence of depression and the presence of cognitive impairment. Comparable results have been reported in the literature. Indeed, in the context of end-stage renal disease, studies show that 20% to 60% of elderly patients have cognitive decline (MMSE < 24)[9,10].
- ❖ These results highlight the value of managing depressive disorders to improve patients' quality of life[11,12]. This quality of life must be one of the major criteria for quality of treatment in elderly subjects treated with dialysis[13].

Conclusion:

Depression is frequent in the elderly hemodialysis patient in the cities of Tataouine and Medenine. The development of effective strategies, taking into account risk factors, is necessary for the management of these patients.

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