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*Case report*

# Dialysis and Depression in the Light of Suicide Attempt with Fruits

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**Abstract**

Depression is a common morbidity seen in chronic renal failure patients but it is often underdiagnosed and undertreated. Here we present a 36-year-old male dialysis patient who had undiagnosed severe depression and attempted to commit suicide with overconsumption of fruits. Fortunately, he was saved with emergent dialysis treatment and was referred to a psychiatry clinic for treatment and observation. In the light of this case we want to point out that diagnosing and treating psychiatric problems of dialysis patients is of vital importance to prevent suicides and also to improve quality of life.

**Keywords: Dialysis, depression, suicide**

## Introduction

Chronic renal failure is often seen with co-morbidities like diabetes, hypertension, cardiomyopathy, arthropathy and peripheral artery disease [1]. Depression is also a common morbidity seen in chronic renal failure patients but it is often underdiagnosed and undertreated [2]. Recognition of psychiatric problems and giving the necessary treatment on time is of vital importance in dialysis patients [3].

## Case report

A 36-year-old male patient was brought to the Emergency Clinic with sudden onset of fatigue. He had been on dialysis treatment 3 times a week for the last 6 months. He also had hypertension and used 10 mg of amlodipine daily. He did not receive any other medications and his next dialysis was at the following day. He did not pay regular visits to a nephrologist, but attended his dialysis sessions on regular basis.

Physical examination revealed heart rate of 220/min and arterial blood pressure of 90/70 mmHg. The other findings were normal.

A venous catheter was introduced immediately, blood samples were taken for emergent routine tests and IV fluid was started. An electrocardiogram (ECG) was performed concurrently. It showed tachycardia with high T waves, broad QRS and P waves, prolonged PR distance (Figure 1). Considering his renal failure, these findings alarmed us on the possibility of serious hyperkalemia. He was given 10 mg of calcium gluconate in 10 cc of isotonic solution as IV push followed by 20 mg of furosemide. 5% of dextrose +16 units of regular insulin infusion was started. His potassium (K) level was found to be 9.55 mmol/L and received a 3-hour-emergency-hemodialysis. At the end of the session, ECG showed normal sinus rhythm and K: 4.86 mg/dl (Figure 2).

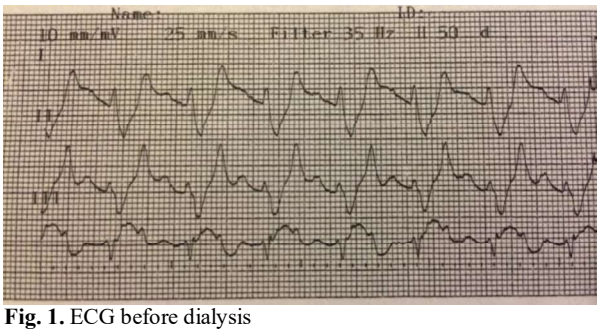


**Fig. 1.** ECG before dialysis

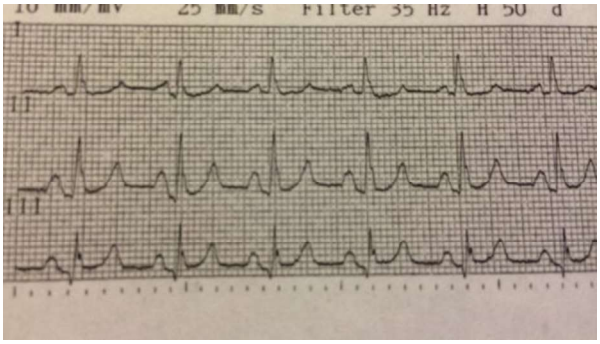


**Fig. 2.** ECG after dialysis

The patient told us that he had been eating apricots all day long although he was especially warned to avoid fruit consumption during his dialysis sessions. The importance of dietary compliance was repeated to him, and we emphasized to him that he could die by eating too much fruit.

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The following day, a dietician talked with the patient and gave him detailed educational brochures regarding his diet. The other day, he was seen by a nephrologist. His K level was 7.48 mg/dl and he received an emergent dialysis again. His wife declared that he had been eating a lot of grapes. She also stated that he fully understood the consequences of his behaviour; she tried to warn him every time he began to eat fruits but he didn't listen to her; it was his intentional act for the purpose of committing a suicide. Three months after his CRF diagnosis, he was on dialysis. He lost his job because of dialysis sessions and was still unemployed. He did not have health insurance and depended on government support. Having in mind these problems and his behaviour, the patient was considered to have major depression and to have suicidal ideas. Hence, he was referred to the Psychiatry Clinic for an observation and treatment.

## Discussion

Depression is often comorbid with chronic diseases and can worsen their associated health outcomes [4]. Chronic kidney disease is a serious chronic disease with such psychological and physical outcomes. Dialysis is a stressful procedure on its own. Patients on dialysis have to depend on machines, invasive procedures and medical professionals for the rest of their lives. Also there is serious food and drink restriction for these patients. Most dialysis patients cannot sustain a full-time job. A serious percent of the patients are unemployed and as a consequence do not have medical insurance. Socioeconomic burdens often cause familial and marital problems [5-7].

According to various studies the prevalence of severe depression is 5-22% and mild/moderate depression 17.7-25% among CRF patients that receive dialysis treatment [8]. Also, dialysis patients have higher suicide rates than healthy population [9].

Presence of a chronic medical illness may decrease the possibility of recognition of accompanying depression by the physician because of overlapping symptoms. Our patient was not diagnosed with depression before attempting to commit suicide. Thus, attention must be paid to signs like depressed mood, loss of interest, slowed thought processes, pessimistic thoughts, lack of appetite, weight loss, fatigue, delay in falling asleep and loss of libido and patients should be questioned regularly about those signs to avoid undiagnosed depression [10]. Suicidal patients use methods like rejecting treatment, disconnecting shunt, overconsumption of K containing food and drugs [11-13].

Counselling and necessary interventions must be a priority of the general treatment when signs and symptoms of depression are present [14]. This would not only improve quality of life, but would also save lives preventing possible suicides among end-stage kidney disease patients [15,16].

*Conflict of interest statement*. None declared.

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