

# Permanent cognitive impairment in a patient with confusional state secondary to hyponatraemia by potomania

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## Introduction

Potomania is a major reason for hyponatraemia on psychiatric patients.

We describe a patient suffering from confusion state in the context of hyponatraemia by potomania.

## Material and methods

53 years old male with mental retardation, hypertension, diabetes, active smoker and alcohol, cannabis and amphetamines ex-consumer.

The patient is staying in a psychosocial rehabilitation unit, previously showing a good level of autonomy.

He suffered from an acute confusional state and behavioural disturbances in the context of hyponatremia values of 122mmol/l. After being treated in hospital, recovered progressively normal levels of Na<sup>+</sup>. Magnetic resonance imaging showed periventricular and subcortical white matter lesions related to his vascular risk factors and no osmotic demyelinating lesions were found.

## Results

Frontosubcortical cognitive impairment remained in spite of natraemia correction levels: temporal disorientation and learning verbal memory with short and long term recall deficit. Moreover patient showed some difficulties in constructive praxia, frontal and visuospatial functions execution. Prevalent behavioural disturbances persisted too.

## Conclusion

Confusional states generally resolve in hours to weeks, but some patients may develop more persistent attentional and global cognitive disturbances.

This patient, with previous described medical history, showed an acute confusional state without ad integrum recovery in a hyponatraemia due to potomania.

The patient suffers from permanent cognitive deficit and behaviour disturbances even if his natraemia was recovered. Also he had an increase on functional dependence, in the context of a multifactorial etiology cognitive impairment: confusional state without ad integrum recovery plus his basal mental retardation and vascular and ex-enol deterioration.

## Bibliography

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