Anorexia nervosa with purgative behaviour: abuse or dependence of diuretics? A case report

C. Peixoto¹, J. Coelho¹, H. Medeiros¹, D. Rego¹

¹Hospital do Divino Espírito Santo de Ponta Delgada, Psychiatry, Ponta Delgada, Portugal

Background/ Objectives

Anorexia nervosa (AN) is a disorder characterized by deliberate severe weight loss, induced and sustained by the patient, and secondary problems due to malnutrition. The symptoms include reduction in food intake, excessive exercise and purgation. A common mean of purging is through diuretic and laxatives abuse.¹

The aim of the authors is to describe and discuss a clinical case of a patient with AN with a long term abuse of furosemide.

Materials and Methods

Case report and a non-systematic review through research in Pubmed/Medline database.

Results

Case report

30 year-old woman, divorced, unemployed

- At 18 starts restricting food intake with purgative behaviour and use of diuretics (furosemide) in order to lose weight

Distorted body image and fear of becoming overweight

First hospital admission at the age of 25 with a body mass index (BMI) of 12,81kg/m², hypokalaemia and acute kidney injury

Treated with a combination of fluoxetine and olanzapine

- Multiple emergency department admissions (lipothymia, dizziness, oedema)
- Sustained harmful use of furosemide

Bad compliance to proposed treatment

Multiple hospital stays

Gradual weight loss and general clinical worsening

September 2018:

Restricted food intake and severe purgative behaviour - abuse of furosemide and self-induced vomiting

Admitted on Emergency department

- BMI 13,68 kg/m²,
- Acute kidney lesion,
- Severe hypokalaemia (1,9 mmol/L)
- Oedema

Abuse of furosemide

- 40 to 60 pills of furosemide 40 mg per day
- progressively used higher dosage to achieve diuretic effect
- difficulty in the control of its use, despite the harmful consequences
- spent all of her income and lot of her time getting strategies to buy it

- During hospitalization the dose of furosemide was gradually reduced with improvement of electrolyte disturbance and oedema

- Fluoxetine was titrated to a dose of 60 mg per day and olanzapine to 20 mg per day

- Clinical evolution with gradual improvement of purgative behaviours until their non-presentation
- Discharged after 77 days of hospitalization with BMI of 18,51 kg/m²

Case discussion

According to ICD-10, diuretic abuse is classified as F55 *Abuse of non-dependence-producing substances*. However, although diuretics aren't a psychoactive substance, according to the ICD-10 dependence criteria, in this case there are also characteristics of a dependence syndrome, such as the dose increase over many years with tolerance development, the strong desire to take the drug and difficulty in controlling its use, persisting in its use despite harmful consequences and higher priority given to use it than to other activities and obligations.¹

There are other cases of diuretic abuse described in literature.²⁻⁶ This abuse is described both in cases of AN^{2,3,4} and Bulimia Nervosa^{5,6}. The most commonly abused diuretic is furosemide.⁶

Conclusion

This case demonstrates a severe case of AN with restrictive and purgative behaviours with a co-morbid diuretic abuse, possibly with enough criteria to diagnose substance dependence.

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