

Syndrome of inappropriate ADH secretion secondary to antidepressants: fact or fiction?

Maria Llobet¹, José María Ginés¹, Jordi León¹, Marta Martín², Sònia Ramos¹, Agnès Sabaté¹, Laura Gómez¹, Santiago Latorre¹, Víctor Pérez¹

¹Psychiatry Service, Hospital del Mar, Barcelona, Spain

²Psychiatry Service, Hospital Universitari Germans Trias i Pujols, Badalona, Spain

Objectives

Analyze incidence of SIADH secondary to antidepressants in hospitalized patients.

Methods

Retrospective review of all consultants to psychiatric service between 2012 and 2013 (n = 1393). Repeated consultations were removed (n = 458) (see Table 1). From the resulting, patients who initiated antidepressant treatment before admission were analyzed and, in these, if they had signs of hyponatraemia suggestive of SIADH, having ruled out other possible causes.

Results

A 30,38% (n = 74) of patients received antidepressant treatment (Figure 1). Of them, 10,81% (n = 8) had hyponatraemia suggestive of SIADH. 57% (n = 4) were male. The average age was 74,85 years. SIADH was caused by SSRIs in 68% (n = 5), 26% (n = 2) by dual antidepressants, and 1 patient (13%) was taking risperidone (without antidepressant) (see Table 2).

Patient	Sex	Age (years)	Psychotropic Drug	Dose) (mg/day	[Na+] (mmol/L)	Possible somatic causes
1	Male	72	Duloxetine	60	118	Diuretics
2	Female	86	Sertraline	50	116	Old TB lesion, diuretics
3	Male	61	Escitalopram	15	128	Active tumor
4	Female	80	Citalopram	20	128	Diuretics
5	Female	65	Risperidone	2	115	Diuretics
6	Male	87	Venlafaxine	225	130	Not listed
7	Male	73	Paroxetine	20	118	Congestive heart failure
			Fluoxetine	20	129	

Table 2. Summary of patients with hyponatraemia suggestive of SIADH. Note that patient 7 had hyponatraemia with two antidepressants

- Same patient
- Same service petitioner
- Less than 15 days between consultations
- Same active process

Table 1. Repeated consultations criteria

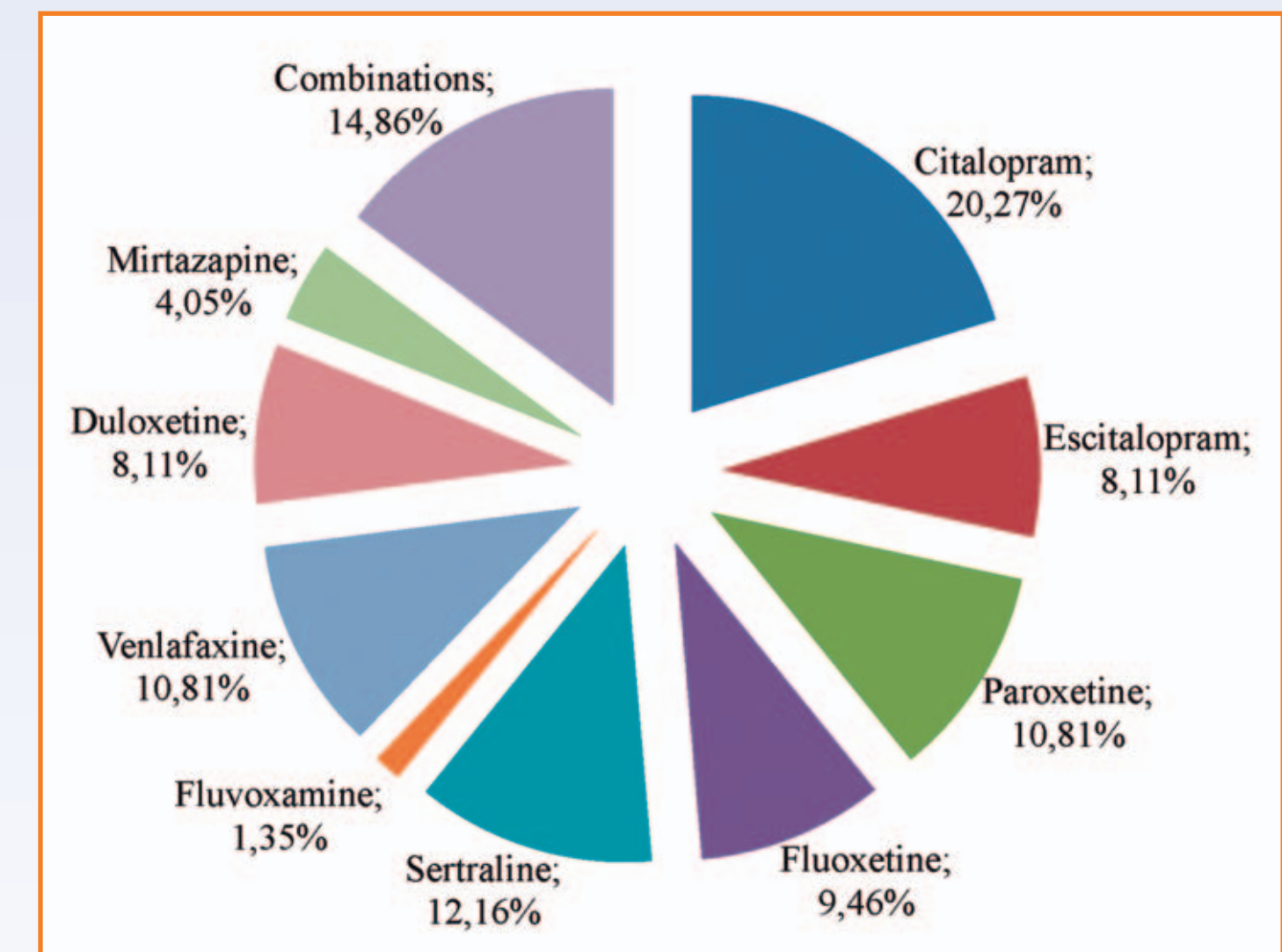


Figure 1. Used antidepressants

Conclusions

According to literature, cases described here mostly are elderly and have concomitant treatment with diuretics that may cause SIADH. Our incidence is 11%. Unfortunately, the actual incidence cannot be calculated because of a significant bias, older patients with hyponatraemia can be clinically symptomatic and require hospitalization.

Increase awareness of this disorder is necessary, especially due to the aging of population and increasing use of antidepressants. We believe appropriate do analytical monitoring in patients over 65 years beginning antidepressant treatment and having other risk factors for developing SIADH. The relative risk of hyponatraemia associated with each SSRIs drug needs to be determined, for that, more research is needed.

Bibliography

- [1] Committee on Safety of Medicines (1994) Antidepressant-induced hyponatraemia. *Curr Prob Pharmacovigil.* 20, 5-6.
- [2] Bouman WP, et al. (1997) Recurrent hyponatraemia associated with sertraline and lofepramine. *Am J Psychiat* 154, 580.
- [3] Jacob S, et al. (2006) Hyponatraemia associated with selective serotonin-reuptake inhibitors in older adults. *Ann Pharmacother* 40, 1618-22.
- [4] Liu BA, et al. (1996) Hyponatraemia and the syndrome of inappropriate secretion of antidiuretic hormone associated with the use of selective serotonin reuptake inhibitors: a review of spontaneous reports. *Can Med Assoc J* 155, 519-27.