

HIP FRACTURES AND ANTIPSYCHOTIC TREATMENT: RETROSPECTIVE COHORT STUDY IN CATALONIA

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Introduction

A retrospective cohort of patients with major psychiatric diagnoses 44, assigned to primary care teams ICS (Catalonia), with prescription of antipsychotic treatment (APT) at least 3 months in a year, between 2006 and 2011. It was conducted in comparison with patients without antipsychotic treatment (non-APT), randomly selected and matched by age, sex and equipment (4: 1). The osteoporotic hip fractures (hip, vertebra, upper epiphysis humerus, forearm, wrist and hand) produced between 2006 and 2014 are assessed and recorded in the regional clinical records “ECAP”. Psychiatric diagnosis were measured during monitoring. Incidence rates per 1000 person-years rate ratios and confidence intervals (95% CI) were calculated.

Objectives

The aim of this study is to explore the incidence of hip fractures in patients with antipsychotic treatment in Catalonia between 2006 and 2011.

Methods

A retrospective cohort of patients with major psychiatric diagnoses 44, assigned to primary care teams ICS (Catalonia), with prescription of antipsychotic treatment (APT) at least 3 months in a year, between 2006 and 2011. It was conducted in comparison with patients without antipsychotic treatment (non-APT), randomly selected and matched by age, sex and equipment (4: 1). The osteoporotic hip fractures (hip, vertebra, upper epiphysis humerus, forearm, wrist and hand) produced between 2006 and 2014 are assessed and recorded in the regional clinical records “ECAP”. Psychiatric diagnosis were measured during monitoring. Incidence rates per 1000 person-years rate ratios and confidence intervals (95% CI) were calculated.

Results

Table 1. Sociodemographics

	non-APT n: 44388		APT n: 11129	
Age (Mean-SD)	67,4	15	67,6	15,1
Women (n -%)	26774	60,30%	6715	60,30%
Men (n -%)	17614	39,70%	4414	39,70%

SD: Standard Deviation

Table 3. Mortality and hospitalizations

		n	RT	CI
APT	Mortality	3647	71,39	(69,11 - 73,75)
	Hospitalizations	282	5,52	(4,91 - 6,20)
non-APT	Mortality	6968	30,27	(29,57 - 30,99)
	Hospitalizations	2337	10,15	(9,75 - 10,57)

RT: Incidence rates per 1000 person/year

CI: Confidence interval

Table 2. Incidence of fractures

		Osteoporotic fractures			Hip fractures		
		n	RT	CI	n	RT	CI
APT	Women	6715	15,56	(14,21 - 17,04)	6715	6,98	(6,11 - 7,99)
	Men	4414	8,27	(7,09 - 9,64)	4414	4,04	(3,24 - 5,03)
	Total	11129	12,67	(11,72 - 13,70)	11129	5,83	(5,20 - 6,53)
non-APT	Women	26774	12,43	(11,85 - 13,05)	26774	4,63	(4,28 - 5,01)
	Men	17,614	4,93	(4,49 - 5,41)	17614	1,7	(1,45 - 1,99)
	Total	44388	9,41	(9,01 - 9,82)	44388	3,46	(3,22 - 3,71)

RT: Incidence rates per 1000 person/year

CI: Confidence interval

The strength of association is higher in men (RT hip fracture: 2.1, CI 1.6 to 2.7) and under 65 years old (RT hip fracture: 4.5, CI 2.9 to 7.0).

Conclusions

The use of antipsychotic treatment for more than three months increases the risk of osteoporotic fractures.

The typical antipsychotics in comparison to the atypical increase the risk of osteoporotic fractures. However in the atypical antipsychotics their association may vary according to the specific mechanism of drug action.

Preventive strategies and collaboration between levels of care are needed to reduce this risk of osteoporotic fractures in people with severe mental disorders. Mental health service patients may require preventive measures including dietary and lifestyle advice.

References

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