

AGITATION AND AGGRESSION IN THE ELDERLY: PHARMACOLOGICAL STRATEGIES IN A COURT OF 84 TUSCANY PHYSICIANS

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Abstract

Agitation and aggression in elderly people is a common issue and physicians may have to deal with this condition during their medical practice. It may be due to several causes such as mental disorders or medical conditions. We decided to submit a questionnaire to 47 psychiatrists and 37 internists, in order to record which pharmacological treatment and method of administration they usually employ and the reason of their choice. The drug mostly used in the treatment of agitation and aggression, regardless of the etiology, was Promazine followed by Chlorpromazine. These drugs were primarily administered by injection, with slightly differences depending on the causes of agitation and aggression. The choice of the drug appeared to be mostly moved by its safety profile. Second generation antipsychotics were barely preferred, in spite of current guidelines suggest

Key words: agitation, aggression, elderly, antipsychotics

Introduction

Agitation is an extreme form of arousal that is associated with increased verbal and motor activity. These symptoms are caused by a variety of etiologies, such as mental disorders, dementia, delirium or other medical conditions¹. Agitation and aggression in elderly people is a common issue that physicians may have to deal with during their medical practice. In spite of its frequency there isn't an univocal treatment and management among physicians². It's reported that in up to 25% of cases, only the symptoms of agitation are treated, without acting on its causes³. This article aims to record which pharmacological treatment and route of administration a court of psychiatrists and internists usually employ in management of agitation and the reason for their choice.

Materials and method

We created a questionnaire and we sent it to 60 psychiatrists and 60 internal medicine physicians working in Tuscany in which they were asked to indicate which pharmacological treatment and route of administration they usually employ among 32 medications commonly used in the treatment of agitation and aggression in a scale from 1 to 4 (in which 1 meant "never", 2 "sometimes", 3 "often" and 4 meant "always"). 47 psychiatrists and 37 internal medicine physicians actually applied to the questionnaire. The questionnaire was made of 5 sections, the first one regarding

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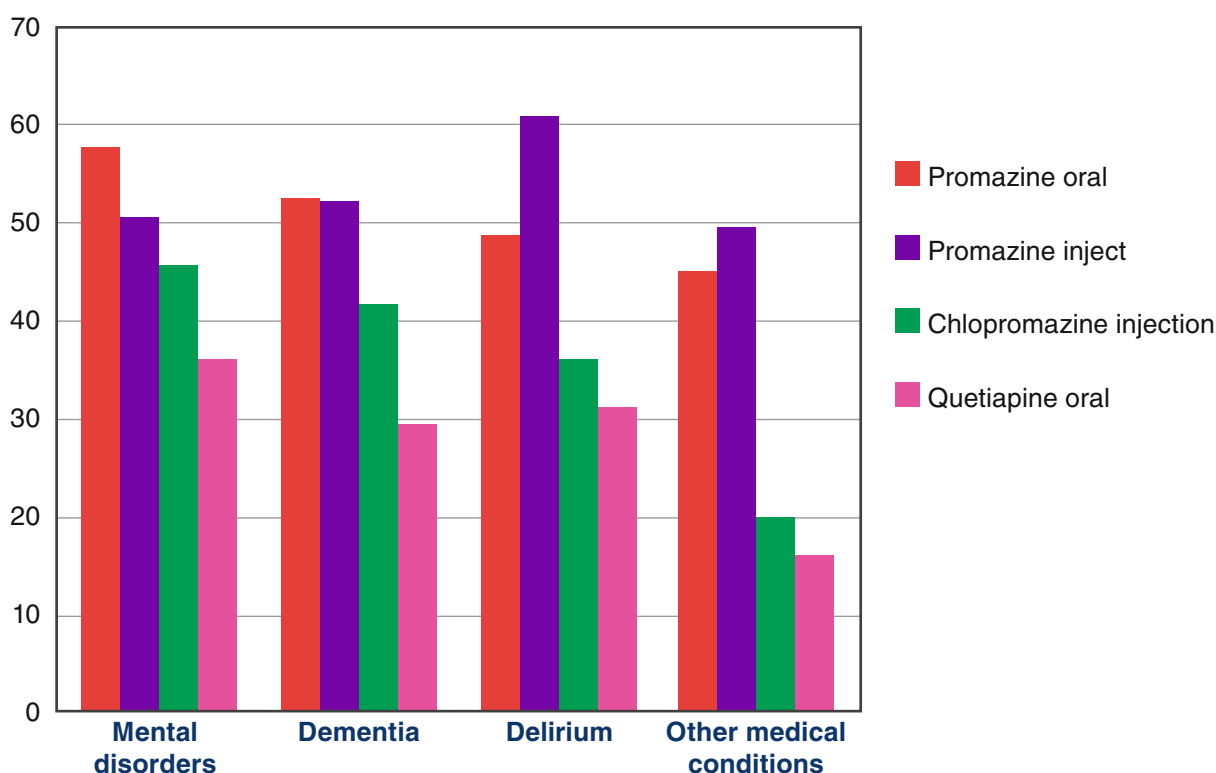


FIGURE 1.

Most used drugs in agitation and aggression.

the treatment of agitation due to mental disorders, the second due to delirium, the third due to dementia and the fourth due to other medical conditions. In the fifth section physicians were asked to indicate in a scale from 1 to 5 (in which 1 meant “not at all”, 2 “little”, 3 “enough”, 4 “much” and 5 meant “very much”) the reasons for their choice (experience, prompt action, safety, availability, previous treatments). We made a statistical analysis of the utilization of drugs that reached 50% of the sample, considering the total percentage of “often-always” answers. We applied the CHI-square test in order to evaluate if the difference in drug prescription between psychiatrists and internal medicine physicians was statistically relevant.

Results

Promazine (oral or via injection) was the most frequently administered drug in patients with agitation due to psychiatric disorders, with a slight preference for the oral route of administration (57.8% vs 50.6%). Moreover, chlorpromazine administered via injection was chosen by the 45.8% of physicians.

In case of delirium, the 60.7% of physicians preferred promazine via injection, while for dementia both the oral and the intravenous/intramuscular formulations

received more preferences (52.4% and 52.3% respectively). In addition, promazine was preferred for agitation associated with organic diseases (Fig. 1).

When asked about importance of the experience with the drug in choosing it, 53% of the sample answered “much”. Similar results were reported for the early onset of action (57.8%), safety (59%) and previous treatment efficacy (55.4%). When asked about importance of prompt availability of the drug in choosing it, only 40.2% answered “much”.

There was a statistical difference in clinical practice between specialists in Psychiatry and other field physicians, mostly regarding the use of second generation antipsychotic medications (Tab. I). Statistical difference between psychiatrist and other physicians was found in the use of oral Promazine in patients with agitation due to dementia (66.7% vs 35.1%, $p = 0,004$) and other medical conditions (55.3% vs 31.4%, $p = 0,032$) and in the use of oral Olanzapine in agitation due to other medical conditions (15.6% vs 0%, $p = 0,015$)

Conclusions

The drug mostly used in the treatment of agitation and aggression, regardless of the reason for use, was Promazine followed by Chlorpromazine. These drugs

Table I. Difference in clinical practice between psychiatrists and internists.

	Mental disorder	Dementia	Delirium	Other medical condition
Promazine oral	61.7% (P) 52.8% (O)	66.7% (P) 35.1% (O)	51.1% (P) 45.9% (O)	55.3% (P) 31.4% (O)
Promazine injection	51.1% (P) 50% (O)	48.9% (P) 56.8 (O)	59.6% (P) 62.2% (O)	51.1% (P) 45.7% (O)
Chlorpromazine oral	51.1% (P) 38.9% (O)	31.9% (P) 54.1% (O)	29.8% (P) 43.2% (O)	13.3% (P) 28.6% (O)
Haloperidol oral	40.4% (P) 38.9% (O)	19.1% (P) 29.7% (O)	29.8% (P) 27.8% (O)	13% (P) 20% (O)
Zuclopenthixol oral	25.5% (P) 33.3 (O)	21.3% (P) 32.4% (O)	25.5% (P) 40.5% (O)	13% (P) 22.9% (O)
Quetiapine oral	46.8% (P) 22.2% (O)	35.6% (P) 22.2% (O)	36.2% (P) 25% (O)	19.1% (P) 11.4% (O)
Olanzapine oral	25.5% (P) 0% (O)	14.9% (P) 10.8% (O)	17% (P) 10.8% (O)	15.6% (P) 0% (O)

P: Psychiatrist; O: Physicians other than Psychiatrist
* difference statistically significant

were primarily administered by injection, with slight differences depending on the causes of agitation and aggression. The choice of the drug appeared to be mostly due to its perceived efficacy and safety profile. Second generation antipsychotics were not used as frequently as the current guidelines suggest⁴. These results actually follow the international trend, showing that in emergency department second generation antipsychotics are rarely used, mostly in oral administration and in association with benzodiazepines⁵.

This is also due to low availability of second generation antipsychotics in emergency departments and insufficient training among medical specialists other than psychiatrists. It would be crucial to standardize managing and treatment of agitation and aggression according to current guidelines, among hospitals and emergency departments. In order to achieve this goal it may be useful organize retraining courses, intended to sensitize health workers to the new available drugs.

Take home messages for psychiatric care

- If possible, choose SGA and oral

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