Antipsychotic prescriptions in nursing homes.
The results of a survey in the Autonomous Province of Trento (Italy)

La prescrizione di anitpsicotici nelle RSA. I risultati di una indagine condotta nella Provincia Autonoma di Trento (Italia)

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Nelle RSA si stima che circa il 15-30% dei residenti utilizzi antipsicotici. Un gruppo di RSA della Provincia Autonoma di Trento ha condotto una indagine con l’obiettivo di ottenere informazioni sulle modalità di prescrizione degli antipsicotici. Il 21,6% dei residenti risultano utilizzare farmaci antipsicotici. La demenza è la condizione clinica presente nella maggior parte dei soggetti trattati con neurolettici (65%). L’antipsicotico utilizzato più frequentemente è risultato l’aloperidolo (37,1% dei trattati), seguito da promazina (29,0%), quetiapina (29,1%), risperidone (12,2%) e olanzapina (7,6%). La prescrizione di neurolettici nelle RSA in esame è elevata. Lo sforzo di ridurre l’uso di antipsicotici in RSA è in linea con le raccomandazioni delle società scientifiche e si avvale di protocolli per la gestione non farmacologica dei BPSD nelle persone affette da demenza e con l’uso attento dei farmaci.

Parole chiave: Antipsicotici, Demenza, Disturbi comportamentali, RSA

INTRODUCTION

In nursing homes is estimated that approximately 15-30% of the residents used antipsychotics; in a cross-sectional study conducted in more than 1700 nursing homes in 5 U.S. states 18.2% of the residents received an antipsychotic (11% an atypical antipsychotic and 6.8% a typical). Epidemiological studies have shown that there is an increase in the use of antipsychotics in nursing homes by 30-50% over the last 10 years; the most prescribed drugs in these clinical settings are atypical antipsychotics (mainly quetiapine, risperidone and olanzapine). Antipsychotic prescriptions in nursing homes are mainly correlates with psychiatric diagnosis, psychosis and dementia; in dementia patients, in particular, the proportion of subjects taking these medication reaches 40-50% of cases.

In a cross-sectional, retrospective cohort study carried out in Europe (SHELTER study) the overall prevalence of antipsychotics use was 32.8% (70%were atypical agents), even with a great variability by country; the strongest correlate of any antipsychotic drug use was severe behavioral symptoms. The prescription of antipsychotics, however, are not only determined by clinical reasons, but remains largely influenced by prescribing practice or organization of the setting of care. Few data are available for the Italian nursing homes; some studies indicates that about 50% of demented subjects received a neuroleptic prescription. As part of a project with the purpose to improve the appropriateness of the use of antipsychotics and to realize alternative treatment modalities, in a group of 13 nursing homes of the Autonomous Province of Trento (Among other purposes) a survey was conducted in order to obtain information on the presciption of antipsychotics and to evaluate the prevalence of elderly subjects treated with these drugs. The study was conducted in 13 nursing homes of the Autonomous Province of Trento, 11 of them are located in the urban area of Brescia and 2 are situated in the rural area. The survey was carried out by the medical staff of the nursing homes with the use of an ad hoc designed questionnaire. The study population were the residents of the nursing homes. The results showed that 21.6% of the residents were treated with antipsychotics, the most prescribed drugs being aloperidolo (37.1%), promazina (29.0%), quetiapine (29.1%), risperidone (12.2%) and olanzapine (7.6%). The prescription of antipsychotics in nursing homes is high and in line with the recommendations of scientific societies and supported by protocols for the non-pharmacological treatment of BPSD in dementia patients and with a careful use of medications.
Province of Trento (associated to the Unione Provinciale Istituzioni Per l’Assistenza (UPIPA) was conducted a survey with the aim to obtain information on the pattern of use of antipsychotics.

RESULTS

In the 13 nursing homes were residents at the time of the survey 1035 subjects, of whom 414 (40.0%) with diagnosis of dementia syndrome. Overall, 26.1% (n = 224) of residents received at least 1 antipsychotic medication; in about one third of cases (n= 66) 2 or more antipsychotics were prescribed (mean number of antipsychotic used in the sample was 1.27). In the residents with dementia 37.9% (n = 157) subjects received antipsychotic. The group of subjects taking antipsychotics was 80.8 years old, and 61.2% were females.

A great variability in the frequency of antipsychotic prescriptions is observed across the nursing homes participating to the survey, ranging from 11.7% to 29.9% of the overall residents and from 15.6% to 68.0% of dementia patients. A correlation analysis does not demonstrated a significant correlation between the proportion of demented in nursing homes and the frequency of use of neuroleptics (r = -0.06; ns).

Dementia is the clinical condition more represented in the subjects treated with neuroleptics (65%), and the disease becomes the almost exclusive among the resident for less than 6 months (25 subjects, 22 -88%, affected of dementia); 20% of patients treated with neuroleptics suffer from psychosis and 9.2% from major depression or bipolar disorder (Tab. I).

Tab. I. Clinical conditions correlated to the neuroleptic prescription in nursing homes.

<table>
<thead>
<tr>
<th>Clinical condition</th>
<th>Diagnosis prevalence in the sample taking neuroleptics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dementia</td>
<td>65.0%</td>
</tr>
<tr>
<td>Major depression/bipolar disorder</td>
<td>76%</td>
</tr>
<tr>
<td>Minor depression</td>
<td>11.8%</td>
</tr>
<tr>
<td>Psychosis</td>
<td>26.6%</td>
</tr>
<tr>
<td>Developmental disabilities</td>
<td>3.4%</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Tab. II. Antipsychotic prescriptions in the overall sample of nursing homes residents taking neuroleptics and in residents for less than 6 months.

<table>
<thead>
<tr>
<th>Drugs</th>
<th>Overall sample</th>
<th>Residents for less than 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloperidol</td>
<td>37.10%</td>
<td>48.0%</td>
</tr>
<tr>
<td>Clotiapine</td>
<td>1.70%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Clopenthixole</td>
<td>3.40%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Promazine/ Chlorpromazine</td>
<td>30.40%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>29.10%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>7.60%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Risperidone</td>
<td>12.20%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Clozapine</td>
<td>5.10%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Zuclopenthixol</td>
<td>2.50%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

The frequency of prescriptions is calculated on subjects taking neuroleptics; 29.4% assumed more than 1 drugs.

Among the residents treated with antipsychotics 37.1% receiving haloperidol, 30.4% promazine or chlorpromazine, 29.1% quetiapine, 12.2% risperidone and 7.6% olanzapine (Tab. II). Benzodiazepine were prescribed in 62.4% of these subjects and antidepressant in 27.8%.

The pattern of treatment is quite different for residents in nursing home for less than 6 months: in these subjects quetiapine is prescribed in 56% of cases, haloperidol in 48% and promazine in 32% (Tab. II).

CONCLUSIONS

The survey carried out in 13 nursing homes located in the Autonomous Province of Trento (northern Italy) confirmed the elevated pattern of prescription on antipsychotics in residents...
greater the consumption of typical neuroleptics compared to other studies \(^5\). The use of antipsychotics in nursing homes increases the risk of adverse events such as falls, hospitalization, mortality and reducing the prescription is considered a goal to improve the quality of long-term care facilities \(^12,14\) in line with recommendations of scientific societies \(^15\). On the other hand it must be remembered that the use of antipsychotic drugs especially for the control of behavioral symptoms in patients with dementia respond to complex clinical, pharmacological and regulatory rules and that for this indication the use of some neuroleptics is considered off label \(^16\) \(^17\). The use of protocols for the non-pharmacological management of behavioral manifestations in people with dementia and the careful use of drugs should be a cornerstone of the paths to improve the quality of care in residential services for frail elderly \(^18\) \(^19\).

In nursing homes is estimated that approximately 15-30% of the residents used antipsychotics. A group of nursing homes of the Autonomous Province of Trento conducted a survey with the aim of obtaining information on the pattern of use of antipsychotics. 21.6% of residents used antipsychotics drugs. Dementia is the clinical condition present in most treated with neuroleptics (65%). The antipsychotic used more frequently was haloperidol (37.1% of treated), followed by promazine (29.0%), quetiapine (29.1%), risperidone (12.2%) and olanzapine (7.6%). The prescription of neuroleptics in the nursing homes examined is high, probably increasing. The effort to reduce the use of antipsychotics prescriptions in nursing home residents is in line with indication of regulatory system and recommendations of scientific societies and makes use of protocols for non-pharmacological management of BPSD in people with dementia and with wise use of pharmacological principles.

Key words: Antipsychotics, Dementia, BPSD, Nursing homes

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References


