

**ANALYSIS OF ANTIPSYCHOTIC POLYTHERAPY IN A PSYCHIATRIC HOSPITAL**

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**Background and importance:** An increasingly widespread practice in psychiatry is the use of antipsychotic combination therapy, not supported in the first lines by any evidence-based clinical practice guideline. In this practice, the use of daily doses higher than those recommended in the technical data sheet is usually appreciated.

**Aim and objectives:** To describe the use of antipsychotics (APs) in a psychiatric hospital, as well as to analyze whether the doses used exceed the maximum recommended daily doses. Secondarily, also describe the use of adjuvants.

**Material and methods:** Descriptive cross-sectional study of all the prescriptions of hospitalized patients. A database was created with the information: history number, sex, age, diagnosis, prescribed APs and its dose percentage (calculated as the sum of the percentage of total daily dose of one or more APs with respect to the maximum dose of the card technique for the age of the patient and the indication to be treated) and adjuvant drugs. The “if needed” doses of APs were also taken into account. Statistical analysis was performed with the SPSS® program, degree of significance  $p \leq 0.05$ .

**Results:** 150 patients, 101(67.3%) men and 49(32.7%) women with a mean age of 42.7 years(range 64-17). 10 patients(6.7%) had prescribed 1st generation APs, 119(79.3%) 2nd generation APs and 31(20.7%) had a combination of 1st and 2nd generation APs. 30.7%(n=46) received antipsychotic monotherapy, and a combination of more than one APs 70.7%(n=106) ( $\text{Chi}^2=12.9; p<0.01$ ). Total number of prescriptions with doses of APs within the technical sheet ( $\leq 100\%$ ) was 62(41.3%), and outside ( $>100\%$ ) was 89(59.3%), of which even 29(19.3%) prescriptions presented doses of APS  $\geq 200\%$ . Of the APS $>100\%$ , 95.3% corresponded to the sum of different APs and only 4.7% to a single APs. The proportion of patients who exceed 100% of the dose is significantly higher among those who have prescribed  $>1$  APs ( $\text{Chi}^2=39.4; p<0.05$ ). % mean APs dose per patient: 127.7%(range 28-379). Average number of adjuvant drugs/patient was  $1.9 \pm 0.9$ , with its prevalence: 40.7% benzodiazepines in monotherapy, 23.3% benzodiazepines plus antidepressants, 18.0% benzodiazepines plus anticonvulsants, 11.3% mixed benzodiazepines, antidepressants and anticonvulsants, and 6.7% other combinations.

**Conclusion and relevance:**

- More than half (59.3%) of APs prescriptions exceed the sum of 100% doses; of these, more than ninety percent are due to the sum of the %doses of the different APs. Although it may reflect the complexity and resistance of the pathologies treated, it does not agree with the recommendations of the national/international guidelines regarding the management of APs.
- The proportion of patients who exceed 100% of the dose is statistically higher among those who have prescribed more than one APs. - Almost 2/3 of the patients had prescribed more than one APs (70.7%), most of these (79.3%) being combinations of 2nd generation APs.
- Although in daily clinical practice, clinicians usually adjust to the doses established in the technical data sheet for each drug individually, this seems not to be taken into account when  $>1$  APs is prescribed at the recommended dose but whose sum exceeds 100% of doses maximum. In both cases, the clinician should request the informed consent of the patient and thus reflect it in the medical history as legally contemplated.
- Current electronic prescription systems do not alert when the maximum dose is exceeded due to the sum of the combination of APs, which opens a possible way of improvement.