TOO MUCH ANTIPSYCHOTICS. ABOUT A CLINICAL CASE

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Introduction

Discovered in the 50s , the first antipsychotics, typical (ty), acted mostly as blocking the dopamine pathways in the brain. In the 60s the first atypical (at) antipsychotic was developed and acted additionally in the serotonin receptors.

They are approved for the treatment of schizophrenia, bipolar disorder, delusional disorder. They are used too in off-label to treat the behavioral symptoms of dementia.

The number of persons with dementia is rising. Among older adults with dementia, a wide range will have a behavioral and psychologic symptoms of dementia (BPSD), and some will put themselves or others in danger. Approximately 70% of individuals with dementia will experience agitation, and 75% will experience symptoms of psychosis such as delusions or hallucinations. ¹

BPSD describes a wide spectrum of noncognitive symptoms, from merely vexatious symptoms to those that can endanger patients and others as verbal and physical aggression, agitation, oppositional behavior, psychosis, sleep disturbances, and wandering.

Indications

The first line treatment for behavioral disorders in dementia are non-pharmacological measures. Antipsychotics can be considered in severe, persistent symptoms and when results in significant distress for the patient or poses a safety risk for the patient and the ones around them. They are probably the best option in the short-term treatment (6–12 weeks) of severe, persistent, and resistant aggression. ²

Adverse events

Serious adverse events are a major contraindication to long-term therapy. Elderly patients are at increased risk of adverse events because of age-related changes in pharmacokinetics and pharmacodynamics and current medical conditions, polypharmacy, and potential drug interactions.

There is a higher mortality for typical than atypical antipsychotics in the first six months after starting therapy. This was due to stroke, hip fracture, myocardial infarction and ventricular arrhythmia. ³

Delirium	Increased Risk of Falls (+ty)
Cognitive and Function Decline (+ty)	Cerebral-Vascular Accidents (+ty)
Extrapyramidal Symptoms (+ty)	Anticholinergic Effects (+ty)
Arrhythmias (+ty)	Weight Gain (+at)
Postural and Orthostatic hypotension	Metabolic Syndrome (+at)
Hyperprolactinemia (+ty)	Sedation(+ty)
Osteoporosis (+ty)	Neuroleptic Malignant Syndrome

Table 1 – Adverse events of antipsychotics

Clinical Case

Figure.1 – Brain CT Scan performed

81 years old female patient, sent to psychiatry appointment one month after being discharged from a hospitalization in the Internal Medicine Department for investigation of a change in her behaviour. She had been found wandering naked in the woods. The patient lived alone and had a 2-year history of dementia. The patient had

history of diabetes mellitus, dyslipidemia and hypertension and was medicated with acarbose, fluvastatin, perindopril. There was no records of previous psychiatry or neurology follow up. Blood sample and lombar puncture was performed with no abnormalities found. A CT scan revealed (...) Signs of bilateral minor strokes (...) chronic ischemic macroangiopathic leukoencephalopathy grade II/III (...) atheromatosis of the neck vessels and a minor global atrophy of the brain. During her in-hospital stay she had periods of agitation and aggressive behavior, being medicated in escalation with quetiapine, risperidone, haloperidol and ciamemazine. She had been discharged with no clear diagnostic and medicated with ciamemazine 20 mgs 2id in drops, haloperidol 1mg 3id, lorazepam 2,5 mg at dinner.

When observed the patient was sleepy, unable to walk, with difficulties to remain seat upright. When awakened she had chicken related visual hallucinations. The patient was disoriented in all dimensions and with anterograde amnesia. There was also axial stiffness. Haloperidol and the ciamemazine were stopped. Mirtazapine 15 mg at night and 25 mg quetiapine in SOS were introduced, Lorazepam was escalated to 4 id and gradually reduced till SOS. Memantine 20mg was gradually introduced too. There was a gradual improvement in the patient behavior. The patient became more active, less stiff and started walking again 2 months later. At 9 months the patient is disoriented in all domains, with anterograde amnesia. She is calm, with euthymic humor and less visual hallucinations. Has a spontaneous speech, answer simple questions and obey simple tasks. The pattern of sleep is regular. No obvious tremors or gait disturbances.

The patient probably has a dementia of mixed etiology and lewy body dementia cannot be excluded.

Conclusions

As the Clinical Case illustrates:

- The first line measures are non pharmacological.
- The use of antipsychotics in the elderly requires an individual assessment
- With the lowest effective dosage and for the shortest period possible
- Benefit, risk balance is required
- Monitorization for adverse effects is needed
- Atypical antipsychotics should be preferred over typical.
- There is no evidence that discontinuation of antipsychotics has a negative effect on patients who have not benefited from the treatment
- New drugs are being developed looking for a better benefit/risk ratio

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