REVISITING ANTIPSYCHOTIC-INDUCED MOVEMENT DISORDERS

19TH WPA WORLD
CONGRESS OF PSYCHIATRY

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Objectives

The aim of this review was to describe and summarize the presentation, epidemiology and management of antipsychotic-induced movement disorders (AIMD) or extrapyramidal symptoms (EPS).

Background

Antipsychotics (AP) are the cornerstone of treatment in psychotic disorders. However, by blocking dopamine receptors, they may induce several side effects, including stigmatizing and unpleasant movement disorders, which can be a major reason for non-compliance and relapse. It is important for clinicians to recognize these disorders, so they can minimize their impact on patient's quality of life. Anticholinergic drugs (ACh's) are widely used on the treatment of AIMD, nonetheless their efficacy is limited in many cases.

Materials and Methods

PubMed database was searched. A literature review was performed based on articles which were selected according to publication date (2010-2019), language (English or Portuguese) and relevance.

Results and Conclusions

AIMD	Prevalence and Risk factors	Signs and Symptoms	Treatment
Akathisia (hyperkinetic)	20-30%. Female, old age, cognitive deterioration, iron deficiency, schizophrenia, high power or higher doses of D2 blockers.	Inner restlessness, irresistible impulse of movement, difficulty maintaining sitted, cross and uncross of legs, march, repetitive actions.	Propranolol up to 60 mg/ day Biperiden 2-8 mg – limited effect
Acute dystonic reaction (hyperkinetic)	90% of symptoms during first 5 days of AP. Several episodes after 1 single administration might be possible. Female, younger than 30, intellectual deficit, history of ECT, coke, AIDS.	Often affects the oromandibular and axial regions. It can also be generalized. Retrocolis, oculogyric crisis, laryngeal dystonia (+++). Rhabdomyolysis.	Biperiden 5 mg IM Clonazepam may be useful in association
Tardive dystonic reaction (hyperkinetic)	0,4-24%. Masculine, younger age, higher dose or association of D2 blockers.	It occurs about 6 years after starting treatment. Cephalic symptoms with segmental caudal progression. Retrocolis, axial extension (+++). Rarely widespread.	Biperiden Tetrabenazine Reserpine
Tardive dyskinesia (hyperkinetic)	24%. Affective disorders, older age, female, total cumulative exposure, diabetes, alcohol, coke, history of ECT.	Begins about 3 months after starting treatment. May last for years after stopping the drug. Stereotyped, complex movements of orolingual region, "Rabbit Syndrome".	Stop/lower the AP dose. Clonazepam, reserpine, α -metildopa, tetrabenazine, valbenazine, amantadine, levetiracetam, clozapine.
Parkinsonism (hypokinetic)	15-60% may have subclinical Parkinson disease. Older age, female, dementia, AIDS.	About 2 weeks to 3 months after starting AP or dose elevation. Bradykinesia, rigidity, rest tremor, insidious gait change.	Stop/lower the dose. Amantadine Biperiden

- ✚ ACh's (biperiden, trihexyphenidyl) worsen cognition and memory and should be avoided in the elderly.
- ✚ Psysicians should avoid prescribing ACh's prophylactically.
- ✚ A reduction of AP dose or a switch to another AP may be considered before introducing an anticholinergic drug.
- ✚ Treatment with AChs should be suspended as soon as the patient is asymptomatic.
- ✚ Prior to an approach attempting to improve cognition, therapy should be reviewed and AChs discontinued if possible.
- ✚ AChs have a limited effect on akathisia.
- ✚ AChs are contraindicated in cases of tardive dyskinesia.

Keywords:

Antipsychotic-induced
movement disorders
Extrapyramidal symptoms
Akathisia
Parkinsonism
Dyskinesia
Dystonic reactions

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