

A FREE SMARTPHONE APPLICATION AND WEBSITE TO ANTIPSYCHOTIC SWITCH

AN ESSENTIAL TOOL

Collège Méditerranéen de Psychiatrie

ABSTRACT - SUMMARY

Prescribing antipsychotics, especially in patients with schizophrenic disorders, clinicians often have the need to change treatment for efficacy or tolerability reasons. However this change of antipsychotic treatment appears to be an issue of concern for all clinicians. Current referentials give us a little purpose or used in practice. Hence, clinicians could quite get a computer application available on the Internet and smartphone that could guide the antipsychotic switch. It is for this purpose that a free application to guide practitioners to achieve antipsychotic relay is now available, in French and English.

The proposals in this guide are based in part on scientific and pharmacological databases available in the international literature (pharmacokinetic 1,2 and pharmacodynamics 1,2 datas, doses of equivalence 1,2,3 and dose ranging of efficacy 2,4) and partly on clinical logic and pragmatic outcomes of daily medical practice that includes the feasibility daily.

This relay guide meets the marketing authorizations (for regulatory requirement), is restricted to relay through antipsychotic monotherapy and is firmly committed to a long course of therapy. The proposals have the dual objective of avoiding a therapeutic window and, at the same time, fostering tolerance by the patient, guaranteeing a good investment in the new treatment. This is in order to avoid these two pitfalls that proposals of this guide was written with the aim to provide a practical tool and easy to use every day.

We tried to be as complete as possible covering 80 % of usual prescriptions in France :

In the coming months will be added antipsychotics not available in France but marketed in other countries.

Switch between Oral Antipsychotics : 8 molecules which mean 320 different switches (on average 6 different doses per molecule) ; Switch from Long Acting to Per Os : 224 different switches (on average 5 doses) ; Long Acting introduction from the parent molecule: 6 molecules (38 different situations). In total 582 different switches

All relays between first and second generation antipsychotics were examined pharmacologically and clinically accurately. No systematic algorithm was applied. Most relays are recommended cross, some are faster and more inclusive trays. The application provides the rationale advocated relay and practice mode with the prescription regimen. Simply enter the current process and the name of the antipsychotic to which the clinician wants to migrate: the dose and method are provided by the application.

Keywords :

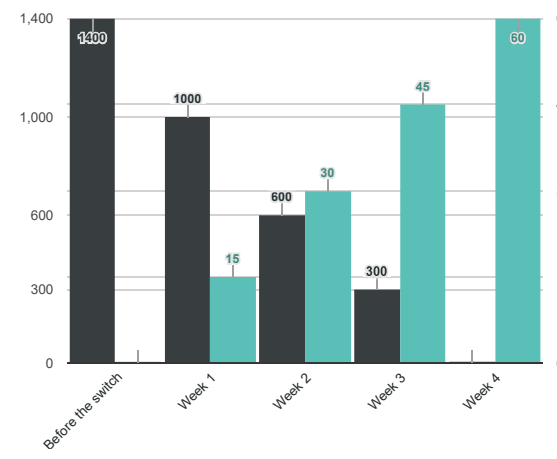
Neuroleptics & antipsychotics, Switch, Neuropharmacology, Schizophrenia

References :

- ▶ Peter F. Buckley, M.D., and Christoph U. Correll, M.D.
Strategies for Dosing and Switching Antipsychotics for Optimal Clinical Management
J Clin Psychiatry 2008;69 [suppl 1] :4-17
- ▶ C.U. Correll
From receptor pharmacology to improved outcomes: individualising the selection, dosing, and switching of antipsychotics
European Psychiatry 25 (2010) S12-S21
- ▶ John W. Newcomer, MD; Peter J. Weiden, MD; and Robert W. Buchanan, MD
Switching Antipsychotic Medications to Reduce Adverse Event Burden in Schizophrenia: Establishing Evidence-Based Practice
J Clin Psychiatry 74:11, November 2013
- ▶ Larry Culpepper, M.D
A Roadmap to Key Pharmacologic Principles in Using Antipsychotics
J Clin Psychiatry 2007;9(6)

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OUR TOOL



- ▶ Facilitates the replacement of one antipsychotic with another.
- ▶ Is based on data in the literature (pharmacological data, dose equivalency, affinities), and on the author's clinical experience.
- ▶ Is applied to patients receiving antipsychotic monotherapy.

These suggestions are not a substitute for the prescriber's clinical experience and judgement.

This tool was developed with funding from sponsors from the pharmaceutical industry, but none was involved in developing the content.

Collège Méditerranéen de Psychiatrie

THE ASSOCIATION



The «Collège Méditerranéen de Psychiatrie» is a scientific association formed by psychiatrists working in hospitals, in teaching and in research.

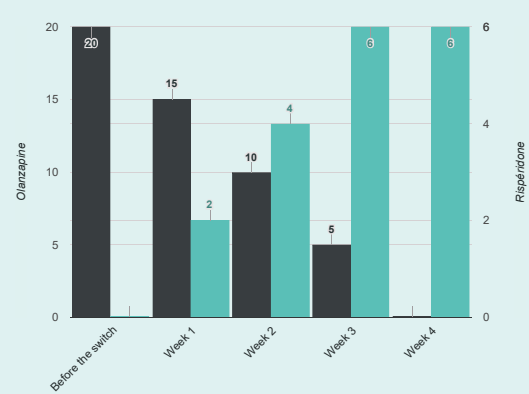
The goal of the «Collège Méditerranéen de Psychiatrie» is to promote teaching and research in different aspects of psychiatry (epidemiological, clinical and pharmacological).

The main goal of the «Collège Méditerranéen de Psychiatrie's» debates, publications and training programs has been to put advances in the field of psychiatry into practice in the day-to-day care of patients.

THE SWITCH was developed for use by mental health professionals with this in mind.

EXAMPLE #1

Olanzapine - 20 mg/day TO Risperidone - 6 mg/day



PERIODE	OLANZAPINE	RISPERIDONE
Before the switch	20 mg/day	0
Week 1	15 mg/day	2 mg/day
Week 2	10 mg/day	4 mg/day
Week 3	5 mg/day	6 mg/day
Week 4	0	6 mg/day

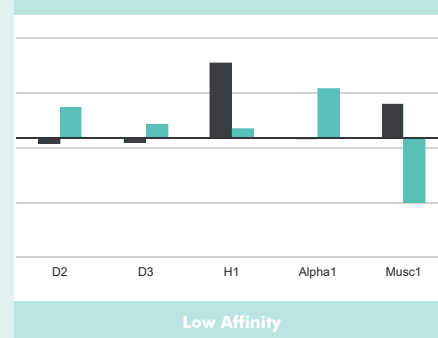
RISKS

For this switch, given the different affinities of Olanzapine and Risperidone, there is a double theoretical risk of :

- ▶ Blocking (by rapid increase of Risperidone) :
 - ▶ Dopaminergic (sedation, extrapyramidal symptoms, akathisia).
 - ▶ Adrenergic (hypotension, dizziness, tachycardia).
- ▶ Withdrawal (by rapid decrease of Olanzapine) :
 - ▶ Histaminergic (anxiety, agitation, akathisia, insomnia, extrapyramidal symptoms).
 - ▶ Histaminergic (anxiety, agitation, akathisia, insomnia, extrapyramidal symptoms).

This is why, at these doses, it is best to do this switch over 3 weeks.

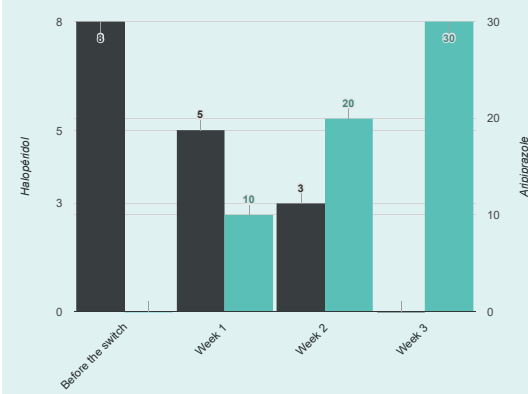
STRONG AFFINITY



Low Affinity

EXAMPLE #2

Halopéridol - 8 mg/day TO Aripiprazole - 30 mg/day



PERIODE	HALOPÉRIDOL	ARIPIPRAZOLE
Before the switch	8 mg/day	0
Week 1	5 mg/day	10 mg/day
Week 2	3 mg/day	20 mg/day
Week 3	0	30 mg/day

RISKS

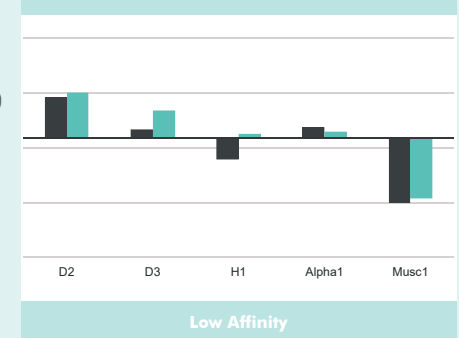
For this switch, given the differences in the mechanisms of action and the affinities between Halopéridol and Aripiprazole, there exists a double theoretical risk of :

- ▶ Dopaminergic withdrawal (psychotic symptoms, agitation, akathisia, dyskinesia withdrawal) in case of rapid decrease of Halopéridol.
- ▶ Histaminergic blocking (sedation, drowsiness, dizziness) in case of rapid increase of Aripiprazole.

This is why, at these doses, it is best to do this switch over 2 weeks.

At these doses, the transition from a typical antipsychotic to another antipsychotic requires extra attention, given the possibility of accumulation of Halopéridol.

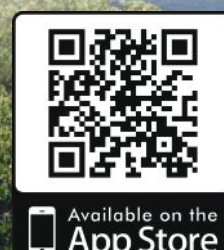
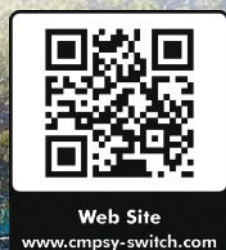
STRONG AFFINITY



Low Affinity

A FREE SMARTPHONE APPLICATION in English and in French

The website is available at : www.cmpsy-switch.com



This application is simple: just enter the treatment in progress, its dosage and the treatment to which the clinician wants to go. The application provides the final dosage, the modalities and the justifications. No algorithms were used and all switches were examined. The knowledge base provides all the principles articles.

The authors remain at your disposal for any further information and requests.