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Rapid metabolism of psychopharmacological drugs and akathisia

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Published in:
Shaping our future

Publication date:
2009

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):

de Blécourt, C. V., & Oei, T. I. (2009). Rapid metabolism of psychopharmacological drugs and akathisia: A two way knock-out punch to therapy in psychotic court-order detention patients. In *Shaping our future: Science and service (syllabus and scientific proceedings in summary form)* (pp. 39-39). American Psychiatric Association.

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chotics in Court-Order detention patients and (2) estimate the value of therapeutic drug monitoring for the doctor-patient relationship.

SUMMARY:

Aim: Investigate whether prescribed antipsychotics have yielded effective plasma levels.

Method: In three groups of ten inpatients (Pompe Foundation for Forensic Psychiatry, 2007) and in one group of ten inpatients (Forensic Psychiatric Center Oldenkotte, 2008) plasma level monitoring was done after informed consent in patients who were using antipsychotic medication in average or high dose. Some were on oral medication, taken under control, others used depot preparations. Co-prescribed drugs were judged for possible pharmacogenetic drug-drug interactions. To exclude a possible role of ultrarapid metabolism, pharmacogenetic investigation was carried out in addition in the patients of the last group of ten patients.

Results: In ten out of 30 and in three out of ten patients, respectively, so in one third, plasma levels were subliminal or relatively low. No duplication of the gene for CYP2D6 was found.

Discussion: Based on the pharmacogenetic outcome the hypothesis of ultrarapid metabolism had to be rejected. One might assume, however, that the intensity of metabolism of the CYP2D6 in this special subgroup of patients was at the fast side of the Gaussian distribution. After scrutinizing the data it occurred that a high percentage of these patients suffered from severe side effects, especially from akathisia, indicative for hypersensitivity for this side effect at even subliminal plasma levels. Both limitations might have led to a selection bias. Probably, when these patients were advised, at the time prior to the offence, to increase the dose of the antipsychotic, they rejected this proposal out of fear of side effects. By adjustment of the dose and after treatment of the akathisia in the present patients, therapeutic effect could be improved.

Conclusion: Special attention should be given from the point of view of prevention in General Mental Hospitals to identify these special subgroup of patients in advance. Plasma level monitoring favors the doctor-patient relationship.

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RAPID METABOLISM OF PSYCHOPHARMACOLOGICAL DRUGS AND AKATHISIA: A TWO WAY KNOCK-OUT PUNCH TO THERAPY IN PSYCHOTIC COURT-ORDER DETENTION PATIENTS

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EDUCATIONAL OBJECTIVES:

At the conclusion of this session the participant should be (1) convinced of the necessity to monitor plasma levels of antipsy-