

## SIDE-EFFECTS OF GENERIC

Klementina Ružić<sup>1</sup>, Paola Medved<sup>2</sup>, Elizabeta Dadić-Hero<sup>3</sup>, Mirjana Graovac<sup>1</sup>,  
Sanja Tatalović-Vorkapić<sup>5</sup> & Ika Rončević Gržeta<sup>1</sup>

<sup>1</sup>University Psychiatric Clinic Rijeka, Clinical Hospital Centre Rijeka, Croatia

<sup>2</sup>University of Rijeka, Philosophy Faculty, Psychology Department, Croatia

<sup>3</sup>Community Primary Health Centre, Primorsko-goranska county, Croatia

<sup>4</sup>Department of Social Medicine and Epidemiology, School of Medicine, Rijeka, Croatia

<sup>5</sup>University of Rijeka, Teacher Education College, Department of Preschool Education, Croatia

### SUMMARY

New trends in medicine which are much more oriented towards pharmacoeconomy, are ever so common these days. There's an aim within the focus of the health system which is cutting down treatment expenses, and that relates to psychiatry practice too. Prescription drugs issued by specialist doctors are allowed to be switched with cheaper ones of the same group of drugs by GP doctors, with an aim of cost reduction. „Instead of the medicament prescribed, a GP doctor is allowed to prescribe an alternative medicament of the same efficacy in the dosage of an adequate strength“ (taken from the specialist medical report form).

A 74 years old man is treated for psychotic depression. Exogenic environmental factors caused the symptoms manifestation due to which hospitalization in a psychiatric ward occurred in two incidences. At the risperidone introduction soon after the second hospitalization event, a long term remission was obtained which lasted for several years. Despite a stable dose of psychopharmacs, new episode of the illness occurred. Researching the potential factors which lead towards the aggravation of the course of the illness disclosed that instead of the original risperidone, the pharmacist issued a generic in an equivalent dose.

**Key words:** psychotic depression – risperidone - generics

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### INTRODUCTION

Depression has become a problem of the society on a global scale, which is evident through a rise in the number of depressed patients that we encounter in our daily practice. According to the results of the research conducted in the EU and the rest of the world, the prevalence of the depressed disorders ranges from 5 to 10%, according to the depression definition and the population examined (Lavikainen et al. 2000, Eaton et al. 2000)

Depression is the fourth most frequent illness in the world today which will potentially change by the year 2020 according to some estimates, with depression being placed on the second place of the all most frequent illnesses in the world (WHO 2001, Murray & Lopez 1997, Murray & Lopez 1997). Etiological factors of the depression emergence can be endogenous and exogenous. The contemporary classification of depression is based on two most important classification systems. ICD-10 is used in our daily clinical practice although the APA's DSM-IV is much more preferred and used in the psychiatry today (Leysen et al. 1988).

There are therapeutic guidelines (algorithms) for treatment of different psychiatric illnesses as well as depression. Antidepressants are used in the treatment of depression, however, at times, a depressive disorder can assimilate a psychotic

feature with pronounced delusions, it is indicated that the addition of lower to medium doses of antipsychotics can be effective. The selection of antipsychotics in the treatment of psychotic depression is completely up to the psychiatrists' choice. The second generation of antipsychotics are usually the choice of treatment of the psychotic symptoms which is due to the better adverse effects profile. Risperidone is a second generation antipsychotic (atypical antipsychotic) which also finds its' place in the treatment of psychotic depression due to its combined antagonistic effect on dopamine (D2) and serotonin (5-HT<sub>2</sub>) receptors (Leysen et al. 1988). Generic drugs can be equally valuable and effective just as the original ones. In the era of a galloping increase of health costs, there is a tendency of prescribing generics, aiming at cost reduction.

### CASE REPORT

A 74 years old man, married, a retired architect, had spent the last 7 years in a psychiatric treatment since his first incidence of hospitalization in a psychiatric ward. Anamnesis revealed an orderly physical and mental health. The psychiatric symptoms' trigger was present in the cumulated problems and stress at work. The clinical picture of depression developed gradually

throughout few months and as soon as it assimilated psychotic features (delusions of guilt, health and existence related delusions), the patient agreed to be hospitalized. Routine examination was conducted at the hospital (laboratory tests, EEG, cons liar specialist examinations, psycho diagnostics). The discrepancies were noticeable in the diagnostics only. The report showed into values of cognitive functions being way below the average, discrepancies in the sensorimotor functioning in relation to organic cerebral dysfunction, with a heightened dimensional value of depressiveness in personality. By the use of combination of medication (typical antipsychotic, tricyclic antidepressants, anxiolytic) a remediated mental state was obtained. Although the clinical picture of depression can seem as pseudodementia, based on clinical experience and a good treatment response, the eventual organic disorder was dismissed and a depressive episode with psychotic elements was diagnosed (F 32.3).

The patient frequented regularly his ambulatory examinations, his mental state was satisfactory but illness remission was not achieved. Six months after the hospitalization, a relapse of the symptoms occurred. An exogenous factor was the trigger of the deterioration of the illness again (attendance to a trial in court). Few weeks afterwards, an acute clinical picture of depression manifested featuring psychotic symptoms which were identical as the ones during the first hospitalization. Due to an acute deterioration of his state, the patient was rehospitalized. An atypical antipsychotic was introduced, risperidone (4 mg) combined with a tricyclic antidepressant and a hypnotic. Considering the fact this deterioration occurred within a year of time, this was comprehended as a continuation of the first (previously described) depressive episode which didn't achieved remission. The patient was diagnosed the same as previously (F 32.3). During the course of his ambulatory treatment, the patient was cooperative, he attended his psychiatric check-ups accompanied by his wife, he showed therapy compliance. A year after his last hospitalization, the medication doses were reduced which was in line with a good patient's mental state (risperidone 2mg, amitriptyline 75mg, zolpidem 5mg/per day). No side effects were noticed nor worsening of the symptoms. A good and quality remission was obtained, his social functioning was satisfactory on all levels, at the patient's and his family contentment.

Three years after a stable remission, the patient attended one of his regular ambulatory check-ups (in regular intervals) when a

deterioration in his mental state was noticed. The patient became tacit, anxious, tensed. According to the information provided by his wife who accompanied him to the check-up, the deterioration commenced gradually, within a month. He manifested exaggerated worry concerning his existence and his own health (without any real grounds for the same), he was restless, non-communicative, avoiding his everyday activities. He had difficulties in carrying out his primary needs, still he managed with great effort, encouraged by his close ones. The sleep rhythm was considerably interfered (difficulty in falling asleep, frequent night awaking). Mental state assessment revealed dominant symptoms within the affective sphere (depressiveness, abulia, anhedonia). Although clear psychotic symptoms (delusions) were not detected, based on his previous experience, there was a high risk of the emergence of them. Detailed anamnesis did not reveal potential causes for the deterioration of the illness. Differentially diagnostic CT scan of the brain was performed which produced NAD results.

Continuing the exploration of the patient (his wife too) with an aim of researching etiology of the occurrence of the acute deterioration, it was ascertained from his wife that the patient was compliant and regular in taking his medication therapy. Besides, it was disclosed that instead of the original risperidone substance (which was prescribed by a psychiatrist and a family GP doctor), the last time the patient went to procure his medicaments, the pharmacist issued a generic risperidone. The patient consumed his therapy for a month and a half before he came to visit a psychiatrist. Regular medication compliance wasn't under question with this patient. Deterioration of the illness which was evident, could only be explained by the switch of the original with a generic risperidone. Again, the original antipsychotic was prescribed in a 2 mg dose, which was emphasized in the specialist's medical report. Alongside with a reinforced anxiolytic and an antidepressant dose (diazepam 20 mg, amitriptyline 125 mg/per day) an improvement in his clinical picture of psychotic depression was achieved within a month. This episode was sanctioned ambulatory, which meant no need for another hospitalization. For the past 4 years, the patient was in a good and a stable remission. Considering the hypersensitivity of the patient to the exogenous frustration factors, which are seen in a constant increase among the general population, doses of risperidone and amitriptyline (risperidone 2 mg, amitriptyline 50 mg) are taken by the patient for relapse prevention.

## DISCUSSION

The medicament price comparison and the patient and society wellbeing are important aspects in the treatment of depression. Generic medicaments occupy a large segment of the pharmaceutical market. The interchangeability of a generic drug and the corresponding brand-name drug is based on the criterion of „essential similarity“, which requires that the generic drug have the same amount and type of active principle, the same route of administration, and the same therapeutic effectiveness as the original drug (Borgheini, 2003.)

Generics can be equally valuable and effective just as the original drugs. In practice, generic drugs are cheaper than the original substances of the drugs. However, a cheaper drug can sometimes compromise the patient's treatment which can become quite expensive (in this case, it is referred to the reinforced dose of an anxiolytic and an antidepressant). The recommendation of our relevant health system institutions states that „instead of a prescribed drug another drug from the same class and effectiveness in adequate doses can be issued“ is allowed and justified in every instance, however, this recommendation can be interpreted differently. A one-way communication from a psychiatrist to a family GP and to a pharmacist is not the best choice in case of the switch of the drugs from the same class. This is because in psychiatric treatment, nor a GP doctor nor a pharmacist are educated adequately to perform a switch from original drugs to generics. Clinical experience is crucial in the treatment of psychiatric patients.

In this case, an equivalent generic drug dose did not exhibit the same level of effectiveness as an original antipsychotic. The risk probability of illness deterioration is possible, which was evidenced in this case report. In the illness deterioration context, there is a question of responsibility arising. The most important index of interchangeability of generic drugs is their therapeutic equivalence to the original one (Akhapin 2008.)

## CONCLUSION

The case report evidences for an unequal effectiveness of the generic drugs over the original ones in the same dose. Clinical psychiatric experience is necessary for the ability of performing the switching of the drugs. If this process is conducted by the GP doctors and pharmacists, they should consider consulting with psychiatrists first. In this case, it was displayed how a one way communication can contribute to a deterioration of the mental state of the patient with psychotic depression. It was our aim to stress out the need for a better collaboration among all medical subjects participating in the treatment of mental patients, which would surely prevent some of the potential deterioration of illnesses which can also increase the treatment expenses.

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Correspondence:

Klementina Ružić

University Psychiatric Clinic Rijeka, Clinical Hospital Centre Rijeka

Krešimirova 42, 51000 Rijeka, Croatia

E-mail: klementina.ruzic@ri.t-com.hr