



Analysis of drug interactions in patients with heart disease: An experience report

Análise das interações medicamentosas em doentes com doença cardíaca: Um relato de experiência

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ABSTRACT

Cardiopathic patients routinely use multiple medications. This polypharmacy, although an important strategy for the control of comorbidities, can lead to numerous drug interactions, in addition to results of altered magnitude and specificity¹. These interactions can be beneficial and expected, increasing treatment effectiveness, but they can also be undesirable, causing the opposite effect to the desired one².

Keywords: Interaction, Omeprazole, Clopidogrel.

1 INTRODUCTION

Cardiopathic patients routinely use multiple medications. This polypharmacy, although an important strategy for the control of comorbidities, can lead to numerous drug interactions, in addition to results of altered magnitude and specificity¹. These interactions can be beneficial and expected, increasing treatment effectiveness, but they can also be undesirable, causing the opposite effect to the desired one².



2 OBJECTIVE

To report the experience of caring for a cardiac patient admitted to a public hospital with a complaint of anginal pain, focusing on discussing the possible impact of drug interactions on the ischemic presentation.

3 CASE REPORT

Male patient, 58 years old, with a history of three acute myocardial infarctions between 2009 and 2018, diabetic with glycosylated hemoglobin of 11.2%, (reference value (RV) <5.7%), dyslipidemic with LDL of 188 mg/dL (RV < 50 mg/dL), hypertensive, former smoker 62 years/pack, former severe alcoholic, reported anginal pain of intensity 10/10 on effort. Medications in use: omeprazole 20 mg, ASA 100 mg, carvedilol 25 mg, clopidogrel 75 mg, enalapril 5 mg, spironolactone 25 mg, metformin 850 mg, gliclazide 60 mg, atorvastatin 40 mg, dipyron 500 mg. The Drugs.com database analysis of the drugs detected fourteen interactions: three (22%) mild, nine (64%) moderate, and two (14%) severe. Gliclazide is not included in the database used. Among the serious interactions is the association between spironolactone and enalapril, which can lead to hyperkalemia (not observed in the patient's tests). The co-administration of omeprazole and clopidogrel is associated with a decrease in the effect of the platelet antiaggregant, although no test to check platelet activity has been performed.

4 FINAL CONSIDERATIONS

The analysis suggests that the omeprazole-clopidogrel interaction may have culminated in decreased effectiveness of antiaggregant therapy. This fact was added to uncontrolled diabetes and dyslipidemia, increasing the risk of a new ischemic event. Therefore, a careful evaluation of the prescriptions is necessary in order to detect possible interactions, avoiding the risks of these interactions to be added to those of other comorbidities, ensuring the effectiveness of the instituted therapy.



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