**ROLE OF NITRATES IN THE PREVENTION OF MYOCARDIAL ISCHEMIA ASSOCIATED WITH CARFILZOMIB INFUSION**

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Carfilzomib (CFZ) is a proteasome inhibitor approved in the US for the treatment of relapsed and refractory multiple myeloma (MM). Side effects include sudden death, pulmonary hypertension, heart failure and myocardial ischemia. Recent work disclosed that CFZ exerts powerful spasmogenic effects on vascular tone and reactivity. CFZ, for instance, increases coronary perfusion pressure (CPP), resting vasoconstricting tone and the spasmogenic effect of different agents. Nitroglycerin and nifedipine lessen CFZ-induced vasoconstriction, with percentages of inhibition peaking at 62.2% and 49.4%, respectively. Of note, CFZ is not contraindicated in patients with recent myocardial infarction/unstable angina who were excluded from the phase II safety trials based on which CFZ approval was granted. Here, we report the case of a 59-year-old male patient with diabetes and relapsing MM, who developed chest pain secondary to myocardial ischemia during infusion of CFZ. Few days after resolution of the acute coronary syndrome (ACS), the patient underwent left heart catheterization, which revealed normal coronary anatomy. On account of the oncological benefit of CFZ and the likelihood of coronary spasm as the most plausible cause of myocardial ischemia, it was decided in agreement with the oncology team, to rechallenge the patient with CFZ after administration of isosorbide dinitrate. Preemptive treatment with nitrates allowed successful completion of CFZ cycles without development of further episodes of myocardial ischemia. Although a larger scale validation of the above findings is needed, our limited data seem to suggest that preemptive treatment with nitrates of patients with MM at high cardiovascular risk can be clinically useful in preventing the occurrence of myocardial ischemia during CFZ infusion.