NUCLEOTIDE HYDROLYSIS IN PLATELETS FROM PATIENTS TREATED WITH CONIZATION OR RADIOTHERAPY FOR UTERINE CERVIX NEOPLASIA

Paula Maldonado¹, Luiz Negrini¹, João Ethur², Rafael Zanin¹, Lara Becker¹, Vera Morsch¹, Maria Rosa Schetinger¹

¹Departamento de Química, CCNE, UFSM e ²Ambulatório de Ginecologia, HUSM, UFSM, Santa Maria, RS, Brazil

Introduction: Uterine cervix neoplasia is an important worldwide health problem and malignancy is frequently associated with thrombosis. The ectonucleotidases, important for the thromboregulation, hydrolyze nucleotides in the extracellular medium. Materials and methods: We evaluated the NTPDase and 5'-nucleotidase activities from patients treated with conization or radiotherapy (RTX). Patients were divided into two groups for conization (I and II) and two for RTX (III and IV): group I and III (treated more than one year), II and IV (recently treated, until three months earlier). The protocol was approved by the Human Ethics Committee from the UFSM under number 126/2004 and all the patients assigned the written consent. Results: For the conization group ATP and ADP hydrolysis decreased in group I (39.12% and 46.9%; p<0.05). AMP hydrolysis also decreased in groups I (47.42%) and II (39.51%; p< 0.05). For the RTX treated group ATP and ADP hydrolysis decreased (36.76% and 36.55%; p < 0.05) in the group III. AMP hydrolysis decreased 42.96% and 79.42% in the groups III and IV, respectively (p<0.05). Conclusions: As a general characteristic, we can observe that the treatments for uterine cervix neoplasia caused a decreased hydrolysis in the nucleotides ATP, ADP and AMP.

Supported by: CNPq, CAPES, FAPERGS and UFSM