IDENTIFICATION OF PLASMA GLICOPROTEINS FROM SCHISTOSSOMIASIS PATIENS AND HEALTY CONTROLS USING CRAMOLL LECTIN AND PROTEOMICS

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Schistosomiasis occurs throughout the developing world and remains public health problem in precarious partner-environmental conditions, which includes the Northeast of Brazil. This infectious illness, of acute and chronic character, has the liver as the major focus of lesions. It is though important understand the influence of this condition in the output of plasma glycoproteins since they may be valuable for diagnosis. Our work intends to identify and compare plasma glycoproteins from healthy individuals and patients with chronic hepatic disease caused by the severe form of schistosomiasis. An affinity chromatography using one specific mannose/glucose binding lectin, purified from Cratylia mollis Mart seeds. Proteins bound to this column were identified by proteomic techniques. Two-dimension gel electrophoreses were realized, for three plasma from controls and three from patients. All resolved spots were first trypsinized and then submitted to MALDI-TOF analysis. At least 35 different proteins and subunits were identified. In addition, 15 proteins such as Plasma protease (c1) inhibitor was just identified in controls and 14 proteins and subunits as LETM1 domain containing 1 isoform 4, in patients. As exemple of our find we can identified Protein Rei, Bence-Jones, Alcohol dehydrogenase beta-3, Alpha-1-antitrypsin, Carbonic Anhydrase II, complement component 3. Hemopexin and Protein Lipid Binding A.

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