PROTEOMIC ANALYSIS OF INFLAMMATORY DISEASE IN THE RESPIRATORY SYSTEM OF RATS TREATED WITH THE FITOTERAPIC MELXI®

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The use of fitoterapics formulated from natural resources present in our native flora has been stimulated in Brazil. The Melxi® is a fitoterapic that associates bee honey with the pineapple crude extract, presenting mucolitic and fluidificant activities. The crude extract of pineapple contains bromelain, a mixture of proteinases derived from the leaves, fruit and stem. Since the Antiquity the honey has been used as antiseptic and bactericide. It is produced by bees (*Apis mellifera*), having as components, 78% of carbohydrates, 0,5% of proteins, 0,2% de lipids, vitamins and minerals. This work evaluated the effect of the Melxi® in the lung and in the bronchoalveolar secretion of rats sensitized with ovalbumin. Two dimension electrophoresis (2D) was used for the investigation of the presence of proteins linked to the inflammatory process. The obtained images were assayed through Image Master 2D Platinum Software. Samples profile from rat lungs showed very similar results. The majority of the spots were concentrated in a molecular weight range between 45-60kD and pH 4.5-7.5. The bronchoalveolar lavage presented major quantity of proteins above 65 kD. In the groups sensitized with ovoalbumin and sensitized with ovoalbumin and treated with Melxi® were seen proteins with molecular weight 20-14kD, such proteins were not found in the group receiving saline after the sensitization.

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