

Abstract

Title: Detection of rheological changes in the axial system of pregnant women using the TVS method.

Objectives: The aim of this thesis is to evaluate the effect of pregnancy on the biomechanical properties of the spine.

Methods: TVS vibration diagnostic methods were applied to six pregnant women twice during pregnancy. It was investigated ability of axial system to dampen vibration spreading through out the spine. The ability of every single segment to damp vibrations were compared with each other at the beginning and during pregnancy.

Results: TVS method used for purpose of this paper has been proved adequate to provide information about the resonant frequencies and the total attenuation of the spine with sufficient accuracy, so that the biomechanice changes of axial system during pregnancy could be decidly identified. Comparison of the frequency dependency and total attenuation of spine indicated increase of total attenuation of the spine and also increase of flexibility of the spine in all investigated probands.

Keywords: gravidity, pregnancy, axial system, vibrations, TVS, spine