The topic of the thesis is evaluation of patients, with lumbar vertebrogenic algic syndrome, using TETRAX. The first part is theoretical. It summarizes anatomy and kinesiology of spine and describes verebrogenic algic syndrom focused on functional disorders. Finally, it includes description of basic principles of posturography and the device Tetrax, method of sensory-motor stimulation and using of 3D Spacecurl. In the practical part, I present the exercises that were tested on three probands on 3D Spacecurl and I examine their influence on movement changes of the probands.