Automatic MR Imaging Analysis of Patellar Tracking Mechanism of the Knee

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ABSTRACT

According to the previous medicinal researches which are about the patellar tracking mechanism of the knees, we can plainly find out two of the most important problems. First, there are many authors who cannot objectively speak out the results of their points, because of the insufficiency of the image data collection. Second, almost these kinds of researches are all statical studies, but cannot perfectly present the status of dynamic movement. Although many doctors have tried hardly to use the magnetic resonance (MR) to process the dynamic studies of patellar tracking mechanism of the knee abundantly, but they still cannot get over the factitious error and time wasting. Therefore, basing on the basis of these requirements, we would like to develop a software to get these issues solved by computers, and then will immensely reduce the factitious error and save time and manpower. In this thesis, we will focus on the point of image processing. Therefore, we will conjugate some pertinent image processing techniques to handle it during the software developed. Also we will deeply discuss those proposed techniques and compare them in order to build the right software.

Keywords : 臏骨 ; patella ; 動態性

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