Abstract

<u>Title:</u> Case study of diagnosis of anterior cruciate ligament reconstruction

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In this Bachelor Thesis I analyzed the anatomy of the knee joint including bones, ligaments, muscles and nerves, kinesiology and biomechanics, ACL rupture and its mechanism. I also included some chapters which are related to the ACL rupture like risk factors, prevention and rehabilitation.

During the clinical work placement I applied individual therapy to my patient for eight times during two weeks including individual exercise program to the gym. The therapeutic plan was based according to my findings during the first day of meeting when I performed the initial kinesiologic examination. Detailed description of the initial kinesiologic examination and day to day therapy are included to the special part of this Bachelor Thesis.

After eight therapy sessions the result was positive with the objective findings to confirm it. The strength of the muscles of the right lower extremity of the patient was improved and the range of motion of the right knee which is the most important was also improved for 20 degrees. More details about the final kinesiologic examination and results are also included to the special part of this Bachelor Thesis.

KEY WORDS: Anterior Cruciate Ligament, balance exercises, m.quadriceps femoris, m.vastus medialis, Range of Motion, Proprioceptive Neuromuscular Facilitation, Post Isometric Relaxation.