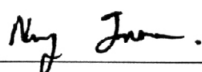


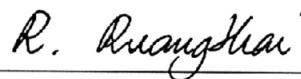
Narong Chunhom 2006: Effects of Deep Water Exercise and Conventional
Therapeutic Exercise Program for Rehabilitation of Post Operative Anterior
Cruciate Ligament Reconstruction in Acute Phase. Master of Science (Sports Science),
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The purposes of this research were to study and compare the effects rehabilitation of
post operative Anterior Cruciate Ligament (ACL) reconstruction on the thigh muscle strength,
range of motion, level of pain, circumference of the knee between deep water exercise and
conventional therapeutic exercise after 2 week. The subjects of this study consisted of 20
patients with ACL injury by volunteer sampling. They were divided into 2 groups with 10
subjects in each group by randomly assignment. Group 1 performed deep water exercise, while
group 2 performed conventional therapeutic exercise, 3 days per week for 2 week. Data were
analyzed by using paired t-test and unpaired t-test. An alpha level of .05 was used for all
statistical test.

The findings revealed that the thigh muscle strength in extension and flexion, range of
motion in flexion, and circumference of the knee at before and after 2nd week of operation were
significant differences ($p < .05$). There are significant differences for range of motion in
extension and flexion, and level of pain between the deep water exercise group and the
conventional therapeutic exercise group ($p < .05$). Therefore, the deep water exercise could
help increased in range of motion and reduced level of pain after 2nd week of post operative
ACL reconstruction.



Student's signature



Thesis Advisor's signature

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