

Research Title: Evaluation of the movements of the coxo-femoral joint in subjects with chronic appendectomy scars

Student's name: Joshua Ravelli

**Research Paper submitted in partial fulfilment of the degree of
BSc (Hons) Osteopathy conversion course**

British College of Osteopathic Medicine

2013

Name of the Journal: **IJOM**

ABSTRACT

Background: Adhesions after lower abdominal surgery are common and are the cause of direct and indirect morbidity, and their preventions can be considered a major public health issue. The association of scars resulting from appendectomy and their effect on hip range of motion (ROM) has not been studied to date. The aim of this study was to evaluate the ROM of the hip joint in subjects that have undergone appendectomy compared to healthy patients that have not undergone any kind of surgery.

Methods: Passive hip flexion, abduction, adduction, internal and external rotation ROMs were simultaneously measured with a long arm goniometer in one session. A total of 10 healthy patients and 10 operated patients that have undergone appendectomy 5 or more years ago participated in the study.

Results: For the operated participants, generally the movements of the left (L) side was greater compared to the right (R): Flexion= R 34,1°- L 44,6° (P-value <0.001); Adduction= R 13,9°- L 15,7° (P-value 0.023); Abduction= R 28,3°- L 31,5° (P-value 0.045); Internal Rotation= R 14,7°- L 25,2° (P-value <0.001); External Rotation= R 32,5°- L 33,2° (P-values 0.487). Instead in the control group all the ROM movements of both right and left side were similar with a maximum difference between R and L side of 0,05°; except for the abduction (R 27,9°- L 28,8°, P-value 0.041).

Conclusion: The present study showed a possible connection between appendectomy scars and hip joint ROM.