CHRONIC POST-CAESARIAN SECTION ABDOMINAL PAIN TREATED WITH MANUAL FASCIAL RELEASE TECHNIQUES: A CASE SERIES

AUTHORS/INSTITUTIONS:

Jennifer Biggers Wasserman, DPT, MS, PhDc,
Physical Therapy Program, Franklin Pierce University, 670 N. Commercial St, Manchester, NH. 03101 USA. Tel: 1 603 647 3550 Email: wassermanj@franklinpierce.edu
Rocky Mountain University of Health Professions, Provo, UT, USA

Jessica Steele, SPT; Melissa Halkiotis, SPT; Jeremy Yuen, SPT’ Elizabeth Riggins, SPT
Physical Therapy Program, Franklin Pierce University, 670 N. Commercial St, Manchester, NH. 03101 USA.

Background and Purpose: Over 1.37 million Caesarian sections (C-sections) are performed annually in the US¹. It is estimated that 12.3% of those will develop chronic scar pain²,³. There is anecdotal evidence supporting the use of manual fascial release techniques in reducing long standing post-surgical abdominal pain, and yet minimal research has been published. This case series aimed to describe the outcomes of 2 subjects with chronic lower abdomen pain post C-section following an intervention of specific fascial release techniques.

Case Description: Subject 1: 35 year old reporting C-sections in 2005 and 2007. Subject 2: 33 year old reporting C-sections in 2008 and 2012. Since surgery both experienced pain during bowel movements and with pressure applied to lower abdomen. Subject 1 also reported sharp pain Numeric Pain Rating Scale (NPRS) 4 -7 with bed mobility. Both reported worsening of pain monthly in week preceding menstruation. Four, 30-minute treatment sessions consisted of: a) skin rolling to scar, b) direct pressure to scar at the point and direction of most discomfort, c) pelvic and diaphragmatic tri-planar myofascial release and d) mobilization of lower abdominal viscera. The duration and direction of each technique was dictated by palpation of tissue response by treating clinician.

Outcomes: Measures included threshold pain and pain tolerance using a Pressure Algometer, Adheremeter measurements of scar flexibility, and the NPRS. Measures were collected at baseline, five days after final treatment and at four-week follow-up to ensure measures were done at the same time in the subject’s menstrual cycle. Both patients demonstrated an improved pressure tolerance ranging from 33%-79%. Scar mobility increased in most directions for both subjects. Increases ranged from 125%-200% in superior glide. Both rated pain for all previously painful activities at 0/10 during the pre-menstrual week following treatment for the first time since their surgeries. It was not possible to calculate statistical significance with a sample size of two.

Discussion: The results of this case series suggest that manual fascial release techniques may help reduce chronic pain in women who have had C-section surgery. Future studies should continue to examine the effectiveness of these techniques in this patient population through the use of randomized clinical trials.
Keywords: myofascial fascial release, manual therapy, C-section

Note: Both subjects signed an informed consent and the study design was approved by the Franklin Pierce University Internal Review Board

References:

