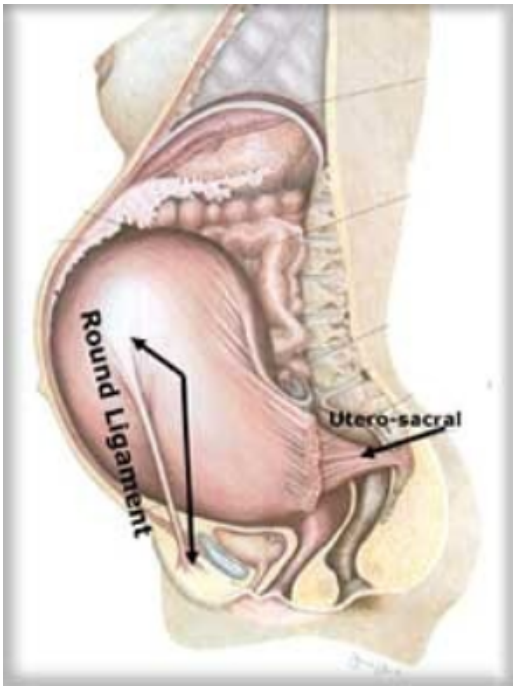
Round Ligament Pain



Definition: sharp groin pains caused by spasm of the round ligaments attached to the uterus associated with movement, coughing, laughing, or sneezing. Can be more common on the right side due to the fact that the uterus more often rotates clockwise. It is most common in the second trimester and eases in the later part of pregnancy, but can occur throughout.

Because many serious conditions can mimic the symptoms of round ligament pain, it is a diagnosis of exclusion.

Prevalence: Round ligament pain is one of the most common prenatal discomforts and is considered a normal part of pregnancy. Increasing severity is common for women who continue to be very physically active, such as runners, or those who have physically demanding jobs, for example waitresses or nurses.

Signs and symptoms: Women will often report intermittent pain ranging from knife-like and sharp to a dull ache in the lower abdomen or inguinal area.

Differential Diagnoses:

- Acute abdomen, including ovarian torsion, appendicitis, pyelonephritis, renal calculi, gallbladder disease, pelvic inflammatory disease
- Preterm labor
- Placental abruption
- UTI
- Ectopic pregnancy

Management:

- *Traditional*: application of heat (heating pad, warm soaks); activity modification such as moving more slowly, bracing the area prior to movement, crunching towards the pain; lifting up the uterus either manually or with support garments; lying in exaggerated, supported Sim's position; tylenol

Picture: Exaggerated Sim's

- *CAM*
    - Pelvic tilt exercises (Andrews and O'Neill, 1997)
    - Yoga, swimming, reflexology to wait and pelvic points, red raspberry leaf tea, massage with arnica infused massage oil (Tharpe and Farley, 2009)
    - Acupuncture has been shown to be helpful for back and pelvic girdle pain, may have some effect on RLP (Elden 2005).

Midwifery role in management: It is believed that most pregnant women will experience round ligament pain in some form. Midwives should give some anticipatory guidance to prepare women to expect this. For women with bothersome symptoms, midwives should educate her on support garments, activity management and exercises that may help.

It is also critical that midwives consider and rule out other, more serious conditions with similar presentations to round ligament pain. This includes a reviewing patient history, symptoms and performing any necessary labs or diagnostic tests.

Once the diagnosis of round ligament pain is made, it is still important to review warning signs of more serious conditions such as increasing severity of pain, vaginal bleeding or leaking, or painful contractions.

Areas of controversy: There is very little evidence for any kind of treatment for round ligament pain. Most literature revolves around the more debilitating types of pain in pregnancy such as low back pain and pelvic girdle pain.

There is limited evidence that maternity belts improve pelvic pain of any kind (Depledge et al, 2005).

There is some evidence that water aerobics can improve back pain and reduces amount of sick leave taken in the second half of pregnancy (Kihlstrand et al 1999). This may be applicable to round ligament pain and other types of musculoskeletal pain.

In addition, many recommended treatments have little evidence, especially those recommended by Tharpe and Farley (2009).

References:

Andrews, C.M. and O'Neill, L.M. (1994). Use of pelvic tilt exercise for ligament pain relief. *Journal of Nurse Midwifery*, 39;6:370-374.

Review: This cohort study of 25 subjects in the third trimester of pregnancy used multiple pain measurements to determine severity of ligament pain before and after pelvic tilt exercises. Verbal reports from subjects found that severity was decreased the most, with some reduction in duration of pain while doing the exercises. Only followed women for one session.

Depledge, J., McNair, P.J., Keal-Smith, C., and Williams, M. (2005). Management of symphysis pubis dysfunction during pregnancy using exercise and pelvic support belts. *Physical Therapy*, 85;12: 1290-1300.

Review: 90 pregnant women with symphysis pubis dysfunction were given exercise and advice recommendations and then were randomized to one of three groups: 1) no belt, 2) elastic belt or 3) rigid belt. All three groups had similar improvements in pain and functioning and, thus, little support for maternity belts.

Elden H, Ladfors L, Olsen MF, Ostgaard HC, Hagberg H. (2005). Effects of acupuncture and stabilising exercises as adjunct to standard treatment in pregnant women with pelvic girdle pain: randomised single blind controlled trial. *British Medical Journal*, 330;7494:761

Review: This study included 386 pregnant women in who received standard care (the controls), and two treatment groups who received either stabilizing exercises to perform or acupuncture. Pain was rated by a visual scale by patients and an independent surveyor. After six weeks, pain was improved in both treatment

groups, but was most improved in the acupuncture group in the opinion of the independent auditor.

Johnson, T.R.B., Gregory, K.D., and Niebyl, J.R. (2012). Preconception and Prenatal Care: Part of the Continuum. In S.G. Gabbe, J.R. Niebyl, J.L. Simpson, M.B. Landon, H.L. Galon, E.R.M. Jauniaux, et al (Eds.), *Obstetrics: Normal and Problem Pregnancies (pp. 111 – 137)*, Saunders: Philadelphia, PA.

Review:

Kihlstrand M, Stenman B, Nilsson S, Axelsson O. (1999). Water-gymnastics reduced the intensity of back/low back pain in pregnant women. *Acta Obstet Gynecol Scand*, 78: 180–5.

Review: A prospective, randomized case control study. 129 women were randomized to either routine care or to participating in weekly water gymnastics classes starting at 18 weeks and continuing through the duration of pregnancy. While back pain increased in both groups as pregnancy progressed, participants in water gymnastics had decreased pain and greatly decreased sick leave (982 days taken in the experiment group versus 1484 in the control group). Additionally, only 7 women in the exercise group took leave from work at 32-33 weeks versus 17 in the control group.

Mullin, L., Alcantara, J., Barton, D., and Dever, L. (2011). Attitudes and Views on chiropractic: A survey of United States Midwives. *Complementary Therapies in Clinical Practice*, 17;3:135-140.

Review: 187 CNMs responded to this survey and all had some form of understanding about chiropractic care and its use to treat pregnancy related

musculoskeletal complaints. 71% of respondents knew that chiropractic care could be used to treat round ligament pain in pregnancy.

Tharpe, N.L. and Farley, C.L. (2009). Care of the Pregnant Woman with Round Ligament Pain. In *Clinical Practice Guidelines for Midwifery & Women's Health (3rd ed)* (pp. 67 – 69). Jones and Bartlett Publishers: Sudbury, MA.