

Drug-Free Pain Relief During Pregnancy

By ERIC MASON AND EMMA MASON

Women face a multitude of problems during and after pregnancy, many of which are not only painful but can be detrimental to the health of the mother and the developing fetus. Pharmaceutical relief of these symptoms is often contraindicated, so the physician has to seek safer treatment options. Physical therapy and massage therapy can fill this void.

As the fetus develops and a woman's ligaments relax in preparation for childbirth, the pregnant mother undergoes many postural changes, potentially causing pain. The increasing size of the uterus causes the pelvis to tilt anteriorly, and lumbar lordosis increases. The mother tends to lean back to compensate for the weight shift, further stretching the linea alba, increasing thoracic kyphosis and forward head posture, externally rotating the hips and hyperextending the knees. Under these conditions, postural muscles are overworked and ligaments that are already slackened are further stretched. This can cause pain and biomechanical dysfunction not only during but also after childbirth.

During the pregnancy, physical therapy modalities and massage can ease muscular pain and trigger points in the overworked muscle groups. Frequently, the piriformis is found to be a pain source



with symptoms mimicking sciatica. Increased stresses on the uterine ligaments can cause pain, which responds extremely well to massage therapy.

Unequal and sustained loading of the intervertebral discs can starve the discs of nutrients, leading to increased risk of degeneration. Simple exercises as taught by physical therapists can not only improve the disc hydration but can also strengthen some of the inhibited spinal muscles, protecting the spine from damage. Physical therapy can also teach the pregnant mother good ergonomics and postural correction exercises to ease her musculoskeletal strain.

Headaches are common during pregnancy and usually have a physical cause. As the breasts and abdomen become heavier, the mother-to-be often adopts a rounded shoulder posture. The pectoral fascia and musculature shorten and further accentuate the kyphotic posture. This in turn causes cervical protraction and increases the strain on the cervical extensor muscles. The increased metabolic waste in the muscles, strain at the muscular insertions to the occiput and the subsequent positioning of the atlas can all cause cervical headaches. Physical therapists can use postural correction exercises, stretches, massage and thoracic mobilization to help improve the cervicothoracic biomechanics, subsequently decreasing the headaches.

Meralgia parasthetica, relatively common during pregnancy, is the compression of the lateral femoral cutaneous nerve as it passes beneath the inguinal ligament because of the increased size and weight of the uterus. The numbness, tingling or burning pain along the outer thigh can be relieved by pelvic manipulation and myofascial release techniques to correct pelvic misalignment and fascial restriction.

Lower extremity edema caused by the changes in the blood vessels brought

about by increased progesterone, the weight of the uterus and the habitual postures the expectant mother adopts, place increased pressure on the femoral venous return. Exercise and massage techniques can assist fluid return and decrease pain and other problems associated with the increased interstitial pressure in the extremities.

Stress is a major problem for the expectant mom. Stress can lead to increased blood pressure, decreased blood perfusion to the uterus and potentially miscarriage. Studies have shown that relaxation massage can reduce blood pressure, increase blood perfusion to the uterus and aid in fetal development, as well as ease anxiety and depression.

Although many options exist for the drug-free treatment of the complications of pregnancy, this should be done judiciously and should only be performed by experienced physical therapists and massage therapists certified in pregnancy massage. The good news for the physician and pregnant mother is that the majority of health insurance companies cover physical therapy, making relief easily obtainable.

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