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Extra Support for the Pregnant Patient

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It should come as no surprise, given all the hormonal and postural changes occurring, that at least half of all women experience back pain during pregnancy,¹ and some of them have continuing back pain after giving birth.^{1,2} In addition, women with severe low back pain during pregnancy have a very high risk for recurrent low back pain of a similar intensity during a subsequent pregnancy.² Naturally, we want to help prevent as much pain as possible, but what can chiropractors do for these women?

Treatment Goals

Here are some goals chiropractors can reasonably aim for when treating female patients during and after pregnancy:

First, we want to support the musculoskeletal system throughout this period of significantly increased stress. With an increase of 20 to 40 pounds to the abdomen, the spine and pelvis are placed under a lot more strain than usual - and these detrimental forces continue postpartum, as the new mother has to lift and carry her baby.

Second, we want to minimize the back and leg pain that develops in many women. While adjustments to the spine and pelvis are helpful, the continuing stress often results in unremitting pain in the back, pelvis, and legs. This can be a terrible drain and a source of discomfort during a period that should be filled with happy anticipation.

Finally, we would like to prevent permanent physical damage from the combination of high-load stresses and lax ligaments. We want our postpartum patients to regain full function without persisting musculoskeletal problems. When ligaments become excessively stretched, there is a good possibility that they will never again support and stabilize as they did before pregnancy.

Chiropractors use many forms of treatments to meet these goals, including adjustments and stretching/strengthening exercises. With the prescription of orthotics, you will likely notice that your treatments are much more effective and long lasting.

Orthotic Benefits

Custom-fitted orthotics offer several advantages to women throughout pregnancy. These benefits include postural improvement, joint stress reduction, support of ligaments, and more comfort while walking and exercising.

Posture. A full-term pregnancy causes numerous postural alterations, which have been found to vary widely.³ Many women develop a significant increase in lumbar lordoses, but the alignment of the pelvis is quite variable.⁴ Other common changes include pelvic "flaring," with a widening of the stance and gait. Custom orthotics provide needed support to the feet and ankles, which makes it easier for the mother-to-be to maintain a relaxed, balanced posture with better joint alignment.

SI Joints. The vital sacroiliac (SI) joints are among the most susceptible to the influence of increased hormone levels. When rotational forces are transmitted up through the body during forward movement, the SI joints are the most affected. Especially during pregnancy, the SI joints are under a terrific amount of stress, and at the same time their strong ligaments are softening. This can result in continuous posterior pelvic pain, even while lying down. By attenuating the rotational stresses, custom-fitted orthotics appears to lessen the constant strain on these joints. There must also be a reduction of neurological irritation, since there is often a decrease in hypersensitivity of the surrounding tissues.

Pedal Structures. The arches are maintained primarily by the ligaments of the feet.⁵ When the extra weight of a pregnancy is combined with ligamentous laxity (induced by hormonal changes), it's a recipe for arch collapse. Many patients pinpoint their first awareness of loss of arch support to their first or (more commonly) second pregnancy. By providing very specific support during this period, future problems can be prevented, while comfort is maintained.

Walking for Exercise. It is standard to encourage most expecting patients to continue exercising sensibly during and after pregnancy.⁶ Regular exercise can help prevent some pregnancy-related problems by maintaining cardiorespiratory and muscular fitness throughout the pregnancy and thereafter. Walking is an excellent activity for the pregnant woman. Jogging should be discouraged, at least in the later stages of

pregnancy, because of progressive lordosis and possible strain on the pelvic ligaments.

A conservative approach to exercise seems wise because of its effects on the fetal heart rate and breathing movements. The maternal heart rate should not exceed 140 to 150 beats per minute for about 15 minutes, three to five times a week. Exercise at this level elicits an aerobic training effect in most women of childbearing age, while producing minimal fetal responses. Gentle stretching and warm-ups before each exercise period are important measures. A cool-down period of 10 to 15 minutes is also recommended. Because walking produces heel-strike shock that can further stress the weightbearing joints of the body, custom orthotics with shock-absorbing capabilities should be worn during this type of exercise.

Early Intervention

Pregnancy's negative effects on the female body (additional weight, an awkward posture, accentuated lumbar lordosis, and increasing levels of ligament-softening hormones) increase steadily throughout the nine months. That's why it is very important to get a pregnant patient into a good pair of custom-fitted orthotics as early as possible. In fact, whenever you learn that a patient is pregnant, or is actively trying to become pregnant, it makes sense to begin discussing the upcoming physical stresses right away. That way, you can recommend orthotics from the beginning, and a woman can get used to them before her body undergoes the inevitable changes.

Conclusion

We can best help our pregnant patients by advising them to stay healthy during pregnancy - through good nutrition, regular exercise, and chiropractic adjustments. An additional source of support for the spine and pelvis is a custom-fitted pair of shock-absorbing orthotics. These can provide a number of benefits both during and after pregnancy. By reducing some of the physical stresses on the muscles and joints of the feet, legs, and pelvis, orthotics can ease the burden of pregnancy, and decrease the need for symptom-relief treatments.

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