Spine surgery during pregnancy

Low back pain is a common symptom in pregnancy and may be present in up to 56% of pregnant women.

The percentage of Caucasians was statistically higher in the back pain group. The percentage of Hispanics was statistically higher in the no pain group. Among the variables that were compared in both groups were the age, the weight gained by the mothers during pregnancy, the baby's weight, the number of previous pregnancies, number of prior children. None of the variables reached a statistically significant level. The pain group complained of pain the low-back area, which radiated in 45.5% of cases to the lower extremities. In about one-third of the patients the pain increased as the day wore on, whereas in another one-third the pain increased during the night and disturbed sleep. Standing, sitting, forward bending, lifting, and walking tended to increase the pain. Most of the patients started suffering from back pain between the fifth and seventh months of pregnancy [1)].

Studies correlated low back pain and pelvic pain with increased levels of relaxin, a hormone produced mainly by the corpus luteum during pregnancy. However, biomechanical changes, weight gain, and sagittal imbalance are also possible etiologies [2)].

Radiculopathy caused by disk herniation during pregnancy is rare, affecting 1 in 10,000 pregnant women [3)], but pregnancy at any stage is no contraindication to magnetic resonance imaging scan, epidural and/or general anesthesia, and surgical disc excision [4)].

Spine surgery during pregnancy is a rare scenario but can be performed safely when needed if providers adhere to general guidelines.

Surgical approaches and overall management are influenced by the stage of pregnancy [5)].

All the previously presented positionings (prone, left lateral) were equally effective regarding the outcome with none being better than another. For left-sided lumbar pathologies performed in the third trimester the right lateral position might be an alternative option for easier access. Based on the literature an epidural and general anesthesia can be applied successfully in the third trimester. Spinal anesthesia might be another anesthesia consideration [6)].

It is necessary to cooperate with a pediatrician, an obstetrician, and an anethesiologists. For obtaining the best outcome on mother and child, it is important to discuss in advance to be able to respond quickly for changeable situation [7)].

Although previously published cases noted the safety of operating in the prone position under epidural anesthesia, we performed minimally invasive microendoscopic discectomy in the left lateral position in combination with general anesthesia and found that this is a safe and preferable alternative for pregnant patients in the latter stage of the second trimester [8)].

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