

## Statement on Nerve Injury During Vaginal Delivery

Vaginal delivery can result in trauma to peripheral nerves, usually nerves that go to the legs and feet. The reason for this appears to be due to anatomical considerations. The nerves that go to the legs and feet arise in the lower (lumbar and sacral) part of the spine and travel within the pelvic cavity on their way to the legs. The interior surface of the pelvis forms a ridge called the pelvic brim, and sometimes, especially with large fetuses or small pelvises the baby's head compresses and "bruises" the nerves at this location. Another vulnerable site is where the Femoral Nerve, which goes to the front of the leg and the quadriceps muscle, courses just beneath the inguinal ligament (the thick cord-like structure that goes from the front of the hip area down to the pubic bone; this is where the crease forms when you raise your knee towards your chest). Sometimes during vaginal delivery it becomes necessary to raise the legs up high to provide help with pushing the baby out. It is thought that in some patients this maneuver may stretch or compress the Femoral Nerve resulting in numbness across the front of the thigh and/or weakness of one or both quadriceps muscles. Either of these conditions may follow vaginal delivery, albeit infrequently. As anesthesiologists, we are sometimes asked to evaluate these patients because they had an labor epidural and their symptoms did not appear until the epidural had worn off, leaving the residual neurologic deficit. Some patients initially fear that they have encountered a complication from their epidural, but a classic pattern of nerve damage with no sign of nerve trauma during the epidural insertion leaves little doubt as to the true cause.