

Pregnancy in Women with Spinal Cord Injury

by Dr. Karen Ethans

Really? Is it possible? Of course it is. But it's amazing how many people, even those in the medical field, don't know that. Since fertility in women is based on hormonal balances rather than on needing certain neurological inputs, fertility is completely normal after SCI. However, there are a few issues that a woman who endures a SCI should know about pregnancy:

Fertility

1) First of all, many women experience a delay in return of their menstrual cycle after a SCI, for up to 6-12 months. This is normal, and it should return to a regular cycle within a year or a bit later.

During Pregnancy

1) *DVT* - Women with SCI are at higher risk of getting clots in the veins of their legs, called "DVT" or deep vein thrombosis. Pregnancy makes that risk even higher. Therefore it's important to keep the legs moving, whether that means the woman doing that herself, or someone doing it for her. Also, pressure stockings should help reduce the risk. Leg swelling or "edema," is also more common, both in SCI and in pregnancy, so putting the legs up when possible and wearing the stockings can help.

2) *Bladder infections and incontinence* - Women with SCI often have a neurogenic bladder, and as the baby increases in size, it can push on the bladder, causing accidents (incontinence). As the end of pregnancy draws nearer, many women find they need to catheterize more often to prevent incontinence, or even rarely use a Foley catheter for a few weeks. Also, urine infections may be more common, and it's important to get these treated, as infected urine is more likely go backwards to infect the kidneys, when there is pressure on the bladder from the baby.

3) *Autonomic Dysreflexia (AD)* - This can occur in people with SCI with lesions at T6 or higher. It is caused by any noxious stimulus below the injury, and can result in severely high blood pressure, headaches, or even coma stroke, or death. A woman with a SCI at or above T6 needs to make her obstetrician aware of what AD is, and even how to treat it.

4) *Mobility problems* - As a woman gets further along in pregnancy, it gets harder to move around. Some women with low or incomplete injuries, who are able to

walk before pregnancy, find they need to use a wheelchair in the last term of pregnancy as their balance becomes poor. Those that could dress, transfer, and do other things independently often find they need more help as they get larger. Therefore, planning for these issues is useful with such things as increasing home care, or family help in the third trimester.

During Labor and Delivery

1) *Lack of awareness of the onset of labor* - Signs of labor are not always recognized in females with SCI. Contractions may not be felt, or they may just be felt as a dull ache. When the water breaks, it may be mistaken for urinary incontinence or vice-versa. A headache from autonomic dysreflexia or increased spasticity may be the only signs of the onset of labor. The woman and/or her care givers should be taught how to feel the abdomen to feel for contractions of labor.

2) *Autonomic Dysreflexia (AD)* - Once again, it is important to stress that AD is extremely common and can be very dangerous in labor and delivery. Those women at risk (injuries at T6 or above) should consider an epidural to help avoid this. Induction of labor is possible, but should only be done if those with lesions T6 or above get an epidural first.

3) *Vaginal delivery* - There is no good reason why a woman with SCI should need a Caesarean section any more than someone else. The only reasons not to have a vaginal birth, include the normal obstetrical indications, and if AD is uncontrolled despite medications. With vaginal birth, those that cannot push may need help getting the baby out with forceps or a vacuum device.

Post Delivery

1) *Breast feeding* - Women with SCI can breast-feed, even tetraplegics, with or without different aids. The Occupational Therapy department can be helpful to design pillows or other devices to help with this. The soreness of the nipples from breast-feeding can also trigger AD. Preventing chaffing can be helped by using Lanolin on the nipples. If this becomes a problem every time the baby feeds, medications for AD or a rest from breast-feeding may be needed, and breast milk can be obtained by using a pump.



Occasionally women with SCI do not experience the "letdown" response with breast-feeding and nasal spray with oxytocin may be needed.

2) *Perineal pain/breakdown* - After an episiotomy or tear, the increased pressure on the area from sitting in a wheelchair can lead to increased risk of breakdown. The area should be inspected frequently, and if it starts to break down, the woman needs to get off of it as much as possible. This perineal breakdown may also be a trigger for AD.

3) *Baby handling* - This may be difficult, especially for women with tetraplegia. Occupational Therapy and Rehab Engineering can be very helpful by supplying equipment, modifying cribs, change tables, strollers, and suggesting positions and other ways to handle the baby.

Certainly this list of problems that can arise in pregnancy after SCI is not comprehensive. A woman who has a SCI and becomes pregnant should have access to input from various team members - a knowledgeable obstetrician who has experience with SCI or is willing to learn, and a physiatrist and nurse who have experience with SCI. Other team members should include Occupational Therapy and Rehab Engineering for adaptations, obstetrical and lactation nurses, anesthesia if the lesion is at or above T6, and any others that need to be involved. However, pregnancy and having a baby is one of life's most wonderful events, and health care professionals should be trying not to interfere too much, in order to make this event as natural as possible for the woman and her family.

A fairly good resource on the internet for this topic is:

www.spinalcord-injury.com/newpregpage.html