

There are many types of nerve injuries that can occur after labour and birth. Most of the time, full recovery occurs quickly (days to weeks). Sometimes full recovery can take longer (months to years). In rare cases, nerve injuries are permanent and full recovery does not happen. This sheet will explain what a nerve injury is, what symptoms to expect, and how nerve injuries are treated.

## What is a nerve injury?

About 1 in 100 people experience a nerve injury after labour and delivery. Injury to a nerve can stop signals to and from the brain, causing weak muscles, and a loss of feeling in the injured area.

## What causes a nerve injury during labour and birth?

There are three main causes of nerve injury during labour and birth.

1. When there is a lot of pressure on the nerve during labour or delivery. This can occur when the thighs are flexed for a long time, causing pressure on the nerves in the groin.
2. When a nerve is stretched or pulled.
3. When there isn't enough blood flowing to the nerve.

## What increases your risk of nerve injury during labour and birth?

- If this is your first vaginal delivery
- Certain labour positions including:
  - Prolonged pushing with your hips & knees bent
  - Prolonged squatting
  - Having your legs in stirrups for a long time
- Baby that is large for your pelvis
- Difficulty delivering baby's shoulders (shoulder dystocia)
- Forceps or vacuum delivery
- Wide incision at cesarean delivery
- Pre-existing problems with nerves (for example, diabetes or sciatica)
- Obesity

## What are the symptoms of a nerve injury?

Symptoms of a nerve injury depend on which nerve is hurt. You may experience some or all of the following:

- A numb area on your skin
- An area of skin that feels like "pins and needles"
- Pain in your back or legs
- Mild weakness in the muscles of your legs
- Severe weakness in one or both legs causing difficulty walking
- Loss of bladder or bowel control

## Did my epidural or spinal anesthesia cause a nerve injury?

Most nerve injuries are not related to anesthesia. Nerve injury after an epidural or spinal anesthesia is rare. The risk of a temporary nerve injury from an epidural or spinal is about 1 in 2,000 and the risk of permanent injury is about 1 in 100,000.

Nerve injuries may be caused by:

- Direct injury to the nerve by the needle or epidural catheter
- Bleeding around the spinal cord (epidural hematoma)
- Infection around the spinal cord or brain (epidural abscess, meningitis)

An epidural may also prevent you from feeling when a nerve is stretched or compressed during labour and may affect your ability to shift position to take the pressure off the nerve.

### How is a nerve injury treated and managed?

Symptoms of nerve injury are usually identified in the days following your baby's birth while you are still in hospital. Before you are discharged, a physician will give you a full assessment and will arrange further investigation and consultation depending on the findings. Most nerve injuries will get better in time without any treatment and can be managed at home or in the community. You may be offered the following, depending on your symptoms:

- Medications
  - Anti-inflammatory drugs such as Ibuprofen
  - Nerve pain drugs such as Pregabalin or Gabapentin
  - Injections of local anesthetic
  - Antibiotics if infection is suspected
- Physical therapy assessment and possible assistive device (walker, foot brace). You may be advised not to carry your baby while walking if you are experiencing leg weakness.
- Referral to an Obstetric Internal Medicine Doctor or Neurologist
- CT scan or MRI of your spine
- Very rarely, you may need to be transferred to another hospital for treatment

### When will the nerve injury get better?

Two-thirds of patients have complete recovery six weeks after delivery. 10% of people may take longer than a year to recover. Very rarely the injury is permanent.

### When should I go to the Emergency Department?

If you are at home and experience any of the following symptoms, you should go immediately to your nearest emergency department:

- Severe back pain
- Severe shooting pain down one or both of your legs
- Unable to walk
- Loss of control of bladder or bowel
- Your symptoms are rapidly getting worse

If you experience symptoms of nerve injury when you are in the hospital you will receive a full assessment.

### Who can I contact if I have more questions or concerns?

An anesthesiologist is available 24 hours a day at BC Women's Hospital.

- Office hours: (M-F 7:30 am – 3:30 pm) call 604-875-2158
- After hours: present to the BCW Urgent Care Center for evaluation