Surgery after Spinal Cord Injury

So, you’ve been living with spinal cord injury and you’ve been fairly healthy, with the occasional ups and downs that come with living with a disability. Surgery does not equal aging but as health status changes, surgery may be recommended to resolve a health problem totally un-related to your SCI. How will your SCI affect your surgery and recovery?

Developing a plan of care with your medical team will help keep you healthy during recovery. Spinal cord injury (SCI) presents some unique medical situations and chances are you will be the most informed about your SCI and the issues involved. Remember, you are in a partnership with your physician for your long-term health care. You need to tell the doctor what your body can and cannot do. Together, you and your doctor will keep you on track for a healthier and more functional life.

This document will give you some basic information about the most common areas of concern after SCI that you may need to talk about with your doctor and surgeon before surgery. If there are other issues that you feel are important to discuss with your doctor before surgery, please do so. This is just a start to the areas of concern….

Typical Spinal Cord Injury Areas of Concern

Mobility

Mobility or how your move yourself around after SCI can be challenging even when healthy. Following surgery your doctor may have certain restrictions on how you do transfers, turn in bed, and how you propel your wheelchair. You will want to inform your doctor how you presently perform these skills.
Areas to discuss are:

- Wheelchair mobility: Do you use a power or manual wheelchair?
- Transfers: Are you independent or do you need assistance. Do you use a slide board, a mechanical lift, or need help from other people?
- Bed mobility: Can you turn by yourself or do you need assistance? How often during the night do you turn?

Activity and mobility restrictions are common after surgery. You will need to discuss this with your doctor before surgery:

- Will you need transfer assistance from your chair to your bed and vice versa?
- Will you need to rent a lift or hire extra help during recovery?
- What restrictions will your surgical incision create?
- How long will you need to be on bed rest?
- When will you be able to resume normal activity?
- What can you expect during recovery and when should you call the doctor?

**Skin Care**

Talk with your doctor about the areas on your body that have decreased or absent sensation. Even though you may be used to your skin sensation changes after SCI, other healthcare providers may not be so aware.

Areas to discuss are:

- Your current skin condition and any trouble spots you may have.
- What you do to protect your skin including how often you turn in bed, how you do weight shifts, and any special mattresses or cushions you sleep and sit on.

Protection of your skin before, during, and after surgery are extremely important. You will need to discuss this with your doctor before surgery:

- Explain your padding needs for during the surgery and in the recovery room.
- Will you be on bed rest after surgery? If you have movement restrictions, will you be able to pad yourself, turn yourself, or direct your care?
- The staff will need to monitor and assist with your turn times every 2 hours to prevent skin sores!
- When should you call the doctor?
**Bladder Management**

How you manage your bladder after SCI is an important aspect of your health. Your bladder management is affected by your level of injury and your lifestyle both of which can be affected after surgery.

Areas to discuss are:

- Your method of bladder management: indwelling urethral or suprapubic catheter, intermittent catheterization, timed voiding, external collector, etc.
- Your current fluid intake habits.
- Frequency and history of urinary tract infections.

Protection of your bladder and kidneys before, during, and after surgery is extremely important. You will need to discuss this with your doctor before surgery:

- What kind of bladder management method will you be able to use during recovery?
- If you use intermittent catheterization (IC), will you be able to IC after surgery or will you need an indwelling catheter? How soon will you be able to return to intermittent catheterization?
- What kinds of fluid restrictions will you have after surgery?
- When should you call the doctor?

**Bowel Management**

Bowel function is affected by your SCI. Bowel programs are affected by what you eat, what you drink, your activity level, and the medications you take. Surgery may affect your bowel program due to changes in activity, pain medications, and changes in what you eat and drink post-surgery.

Areas to discuss are:

- What is your bowel program schedule and how do you do it? Are you independent or need assistance?
- Current medications for your bowel program including any suppositories and over the counter medications and supplements.
- Foods you eat to help you with a consistent, healthy bowel program.
Maintaining a regular bowel program before, during, and after surgery is extremely important. You will need to discuss this with your doctor before surgery:

- What activity restrictions will there be after surgery?
- Will medications change after surgery? Pain medication can cause constipation. Talk to your doctor about how to avoid constipation during your recovery.
- What kinds of eating and drinking restrictions will there be after surgery?
- How soon after surgery will you be able to return to a regular bowel program routine?
- When should you call the doctor?

**Medication Management**

After a SCI, the type and amount of medications each person takes varies according to level of injury, pain issues, spasticity, and blood pressure issues. You will want to have an up-to-date list of all the medications and other supplements you are taking to give to your doctor.

Areas to discuss are:

- Any type of anti-coagulation medications, including aspirin, Coumadin, Lovenox, and Plavix. These drugs reduce your body's ability to form a blood clot which could cause you to bleed uncontrollably during and after surgery. If you are taking an anti-coagulant your doctor will have specific instructions on when and how much you should take before and after your surgery.
- Any type of herbal supplement, vitamin, or over the counter medications. These may contain factors that interfere with blood clotting, healing, or brain activity.

Maintaining your regular medication routine before, during, and after surgery is extremely important. You will need to discuss this with your doctor before surgery:

- What new medications will be added to your routine after surgery?
- How soon will you be able to return to your usual medication routine?
- What are the side effects of the medications you take and what is the expected outcome?
- When should you call the doctor?
Additional Areas of Concern for People with SCI:

Autonomic Dysreflexia

Autonomic dysreflexia (AD) is an emergency condition that needs immediate attention! It’s most likely to occur if you have a spinal cord injury at or above thoracic-level-6 (T-6). Autonomic dysreflexia is an abnormal response to a problem somewhere in your body. Because of your SCI, your body can’t respond properly to signals that something is wrong. Instead, you may develop a rapid rise in blood pressure. High blood pressure is a serious medical problem. It can cause a stroke and death. Autonomic dysreflexia can be life-threatening. It requires quick and correct action.

Signs and symptoms of AD:

- Sudden increase in blood pressure
- Pounding headache
- Decreased heart rate
- Goose bumps
- Sweating
- Flushing of the face, neck and shoulders,
- Blurred vision or spots in visual field
- Feeling anxious or of “impending doom”

Unfortunately, many health professionals aren’t familiar with this condition. You may have to help guide your own treatment by ensuring that health-care professionals are thinking about autonomic dysreflexia when they are treating you.

Areas to discuss are:

- Are you at risk of AD? Do you have a spinal cord injury above T6?
- Have you had AD in the past? What caused it? What made it go away?
- Possible causes of AD during surgery and recovery include:
  - Discomfort from new surgical sites
  - JP drains
  - Wound vacs
  - Positioning in bed

Prevention of autonomic dysreflexia before, during, and after surgery is extremely important. You will need to discuss this with your doctor before surgery:

- Talk to your doctor about adequate pain medications.
- Develop a plan of care to monitor for AD and to treat it quickly if it occurs.
**Blood Clots**

Blood clots (also called deep vein thrombosis [throm-BO-sis]) most often occur in people who can’t move around well or who have had recent surgery or an injury. Blood clots are serious. For a person with a SCI, blood clots are most common in the first 3 months after the initial injury. But with a surgery, the risk of blood clot formation returns due to reduced activity and injury (surgery makes a cut in the body).

Areas to discuss are:

- Your personal health history with blood clot formation.
- Your concerns about blood clots.

Prevention of blood clot formation before, during, and after surgery is extremely important. You will need to discuss this with your doctor before surgery:

- What routines will be in place to prevent blood clots?
- Will there be new medications added to prevent blood clots?
- Will you wear TED hose or have compression stockings to wear after surgery? How long do you need to wear them?
- What are the signs and symptoms of a blood clot and when should you call the doctor or go to the emergency room?

**Respiratory Therapy**

Depending on the level of SCI, a person may have trouble breathing on their own or taking full breaths. After surgery, people tend to take shallow breaths because of pain or simply because they are in bed. Deep breathing exercises are important in keeping your lungs healthy after surgery.

Areas to discuss are:

- Your personal health history and ability to breathe deeply.
- Do you need suctioning or assistance with quad coughing?

Prevention of respiratory problems before, during, and after surgery is extremely important. You will need to discuss this with your doctor before surgery:

- Change your turn times in bed to every 2 hours to prevent fluid build-up in the lungs and to prevent respiratory problems!
- Will you have respiratory treatments? Will you need to use oxygen after surgery?
- Will you be using an incentive spirometer? An incentive spirometer is a device that encourages you to take deep breaths and prevent respiratory infections.
- What is the plan if you develop congestion or have difficulty breathing after surgery?
- When should you call the doctor?