

You are going to have surgery A Guide for Polio Survivors

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Why preparation for any surgery may be important

As a result of the polio virus infection, nerve cells in the spinal cord and brain stem which control limb and trunk muscles, muscles of breathing and swallowing, were affected.

After rehabilitation you may have had a full recovery or were left with weakened or paralysed muscles. Especially if you were on a respirator your breathing muscles were affected and even with apparent full recovery, these muscles may be weak. You may not know that these muscles were affected.

Despite apparent full recovery, polio survivors have fewer nerve cells supplying their muscles than individuals who never had polio. This often means that your muscles have been working at greater capacity than in a non polio person and, as you age, these overused muscles are starting to wear out. Additionally, joints controlled by weak muscles may have instability, poor alignment and have arthritic changes.

Some polio survivors are experiencing new health problems of fatigue, new weakness, new pain, cold intolerance, breathing, coughing or sleep problems.

Even if you are not experiencing new problems, your polio history puts you at greater risk of potential problems during and after surgeries than a person who has not had polio.

Individuals who experienced breathing problems during acute polio, perhaps were on a respirator or in an iron lung, have a spinal curvature (scoliosis) are at greater risk even if there are no apparent problems prior to having surgery.

You should take the responsibility to inform, re-inform and educate surgical staff; including dentists, of your polio history, current level of functioning, fatigue level and known responses to medications

You always should carry a card, an Injury Control Checklist, or wear a Med Alert bracelet

stating that you are a polio survivor. You may not always be able to speak for yourself! You could be unconscious.

Medications required for surgical procedures, before, during and after the surgery may further affect your ability to:

- breathe
- cough and clear secretions
- move about in bed or out of bed

You may be placed at **greater risk** to develop post operative complications, such as pneumonia, partial collapse of a lung, deep vein thrombosis. An informed medical or dental staff will be alerted to this increased risk and be able to take the necessary precautions.

For what types of surgery is this important?

It is important for ANY type of surgery that requires anaesthesia, pain medication, muscle relaxants, sleep medications.

This includes dental surgery such as tooth extraction, orthodontic surgery, surgery as a day patient, as well as surgery as an inpatient.

If you have weakness of your respiratory muscles, discuss with your family physician and the surgeon whether the surgery can be performed under a local rather than a general anaesthetic. Could a spinal anaesthetic be used? Your fatigue level should be assessed. A pre-operative referral to a respirologist may be advisable.

What to do when surgery is required

- Discuss with your family physician, the surgeon and anasthesiologist what type of anaesthesia will be, can be used.
- Ensure the clinic / hospital staff are aware of any functional limitations you may have, such as the use of any aids.
 - raised toilet seat
 - o grab bars next to the toilet, washbasin, in the shower, on the bath
 - o grab bar over the bed
 - o normally use a cane, crutches, a wheelchair? Will this be feasible after surgery?
 - you may need to use certain aids for a short period post-surgery, ones you don't normally use.
- Confirm before admission that any essential aids (eg. Grab bars) are present in the ward / room that you will be in.
- Alert the surgical team to your level of fatigue. Are you able to have day surgery scheduled, planning to return home and function there following the surgery?
- Is pre-surgery testing planned for the same day as the surgery? Can you manage this?
- If surgery is planned on your legs, will you be required to use crutches following, be non-weight bearing for a period? Will your arm strength permit this? Presence of arthritis, perhaps involving your hands, or a scoliosis should be noted.

Medications

Any adverse responses you are aware of in relation to specific medications should be made known. The assistance of your family physician should be recruited to ensure the surgical team is fully aware of how medication(s) affect your level of function.

What effects can different medications have?

- analgesics (narcotics) such as codeine, morphine, Valium etc., will depress the cough reflex, decrease the ability to breath especially deeply, or to cough properly required to clear the lungs of secretions. Muscle weakness is increased possibly causing greater problems in moving about in bed, to the bathroom etc.
- **muscle relaxants**, these may further impair your ability to breathe, cough, swallow and move your body .. do routine activities.
- **sedatives, hypnotic drugs**, these also decrease the respiratory drive, increase drowsiness (as intended) which may result in shallow breathing, ineffective coughing, and with the lack of movement, increase the risk of a deep vein thrombosis.

If during the acute polio illness you were in an iron lung or on a respirator, told you had bulbar paresis or paralysis although you perhaps are unaware of any respiratory or swallowing problems now, this information should be given to the medical-nursing team.

You should ensure that another individual, spouse, relative, friend, is available to remind, if necessary, the health care team of your polio status and level of function.

What about the post operative period and discharge?

- Again, the team should be made aware of your level of function, any aids needed, in order to set an appropriate management plan.
- Your home situation should be explained. It may be necessary to have temporary Home Help, it may not be feasible for you to initially return to your home.

The health care team can only act in your best interests if they are informed about your polio history, current status and possible existance of adverse reactions to medications.

For further information contact:

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