Patients with a polio history — what anaesthetists need to know

Liz Telford OAM, a founding member of Post Polio Victoria, says anaesthetists need to be aware of the anaesthesia requirements of people with polio.

WHEN PRESENTING FOR surgery, people with a history of polio are often told that they are a rarity. It is estimated, however, that up to 40,000 people contracted paralytic polio in Australia between 1930 and 1988.

It is also reported that migrants and refugees are increasingly attending polio-related services, so although there are no official figures, we know that there are thousands of people with polio-related issues across Australia from as young as 30 years old.

Hospitals will be seeing polio survivors for at least the next six decades, with needs as broad ranging as childbirth to heart repairs.

We are generally not keen on having surgery due to the unique risks, however the misconception that we are a rarity indicates a lack of awareness by those who should be informed. Often with a background of negative childhood medical treatment, we have the responsibility of educating the medical staff looking after us in hospital, which creates a stress beyond the normal preoperative concerns.

Not only is the onus on us, the patients, to remember to inform the hospital of our polio history, we must also provide information on its surgery and postoperative implications, not knowing how this potentially lifesaving information will be received or if it will be heeded.

Polio does not "end" with the attack on the anterior horn cells of the spinal cord.

To manage anaesthesia risks anaesthetists must understand the post-polio sequelae (PPS), the neurological and muscular skeletal condition that develops 20 to 40 years later. The resulting cold intolerance, skeletal deformity, muscle weakness and denervation, osteoporosis and respiratory issues pose a number of risks. There is often increased sensitivity to sedating drugs, opiates, muscle relaxants and anaesthetic drugs[4,5]. The usual question about drug allergies is not enough, as while the patient with PPS may not have any allergies they may not be aware of the sensitivity of their central nervous system.

Anaesthetists need to know that not all people with a history of polio will raise these issues. Some will not realise that their polio history is relevant to their impending surgery, or have the knowledge, confidence or the command of the English language to provide this information. The power imbalance between doctor and patient is often exacerbated when there is a history of childhood disability[2].

It is important for the anaesthetist to take the time to understand the patient's polio history.

We have many and varying hospital experiences. One anaesthetist initially refused to read the online resource regarding anaesthesia and polio provided by a patient about to have emergency surgery at a Melbourne hospital. With only a tense and brief preoperative discussion of her polio history, postoperatively the patient experienced hypotension, extreme cold and suffered a lower back injury from poor positioning.

"The power imbalance between doctor and patient is often exacerbated when there is a history of childhood disability."

Members of advocacy group, Post Polio Victoria

Positive examples occur such as when the anaesthetist took the polio history of a patient, read the information offered and discussed the PPS implications. The risk for the patient was reduced, and she had her surgery with the confidence that the anaesthetist understood her specific situation.

Polio already affects all aspects of our lives. It should not also be our responsibility to ensure that hospitals are safe for us. The COVID-19 pandemic, and those affected, will be considered and studied for years to come. Those of us living with the impacts of the global polio epidemic or lack of vaccination programs would like to have the confidence that when in hospital we are in the hands of people who have taken the time to educate themselves about our condition.

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