

Reported problems in relation to operation and anesthesia

in a Danish population of polio survivors

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Introduction:

It is said that polio survivors are more sensitive to anesthetics and that they have an increased risk of having complications.

Aim:

The aim of this study is to describe the frequency of postoperative symptoms experienced by polio survivors in relation to anesthesia.

Methods and material:

Among members of PTU (Danish Society of Polio and Accident Victims) an age and sex stratified random sample of 400 polio survivors aged 50 – 89 years was drawn. A questionnaire concerning anesthesia was mailed to the selected members with a letter of introduction. Non responders received a reminder after one month.

The questionnaire included questions about symptoms experienced at the acute polio, if operated: the type of operation and anesthesia, post operative experience with regards to waking up, pain and recovery.

Results:

The response rate was 71%. In order to avoid problems in relation to obsolete anesthesia, we excluded responders, who had operations earlier than the last 20 years. The following therefore refers to the remaining 92 responders.

Twenty one percent had experienced problems in relation to an operation. Problems reported were: extraordinary pain 8%, a decline in muscle strength 9%, pressure ulcers 1% and extraordinary long waking-up time 16%.

There was no significant relation between respiratory problems at the acute polio attack and prolonged waking up time, but the numbers were very small.

The time to regain usual functional ability, varied from 0 to 52 weeks with a median of 1 week. Problems relates directly to the operative trauma were excluded.

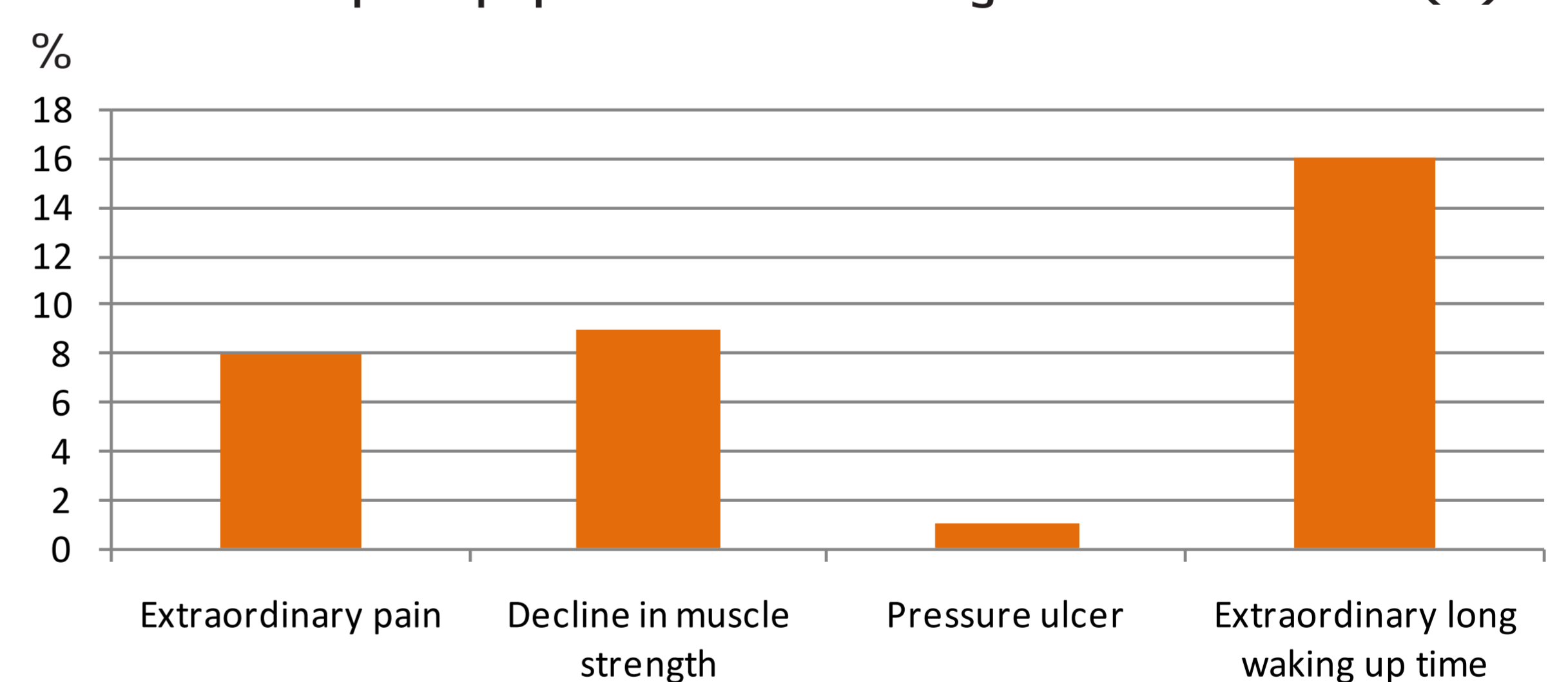
Conclusions:

Results from this study show that polio patients experience postoperative symptoms to an extent that seems to be beyond what is expected from operative patients in general. Prolonged waking up time and muscle weakness are especially problematic. To prevent these problems polio patients should be carefully monitored pre-, per- and postoperatively and attention should be given to the doses of medicine administered.

This study is based on patient experience. A recent study of patient records from Brazil (1) has shown that polio patients can be safely anesthetized as long as their polio symptoms are addressed and they are rigorously monitored. The patients however were much younger than our sample.



Problems in a polio population related to general anesthesia (%)



Key points:

- Polio patients report long waking-up time and muscle weakness after operations, and require careful monitoring of the operative course.
- Data collection from anesthesia reports of a polio population is needed to describe the problems more specific.

Reference:

1. Rezende D P S et.al. Patients with sequelae of poliomyelitis. Does the anesthetic technique impose risks? Rev. Bras. Anesthesiol. Vol. 58 no. 3 Campinas May/June 2008