General anaesthesia for the treatment of children with radiotherapy

Information for parents

Radiotherapy Department
This information sheet has been written for the parents of children who might need a general anaesthetic for a course of radiotherapy treatments.

Why a general anaesthetic?

To get the maximum benefit from radiotherapy it should be delivered to a precisely defined area. To do this your child needs to keep still. If this is not possible then we need to give a general anaesthetic. If you have any doubt about the need for a general anaesthetic for your child please discuss this with us.

What does a general anaesthetic involve?

Radiotherapy is not painful so we can give a light anaesthetic with short acting anaesthetic drugs. Our aim is to get your child awake and back to normal as soon as possible. The best way to do this is to inject the anaesthetic drugs directly into the vein through a central venous line called a “Hickman” line.

The anaesthetic drug takes about 15 to 20 seconds to work and your child will become forgetful then they may wriggle, before becoming floppy and unresponsive. At that point we will give your child some oxygen, assist their breathing and start positioning for the treatment. As the radiotherapy finishes we will start waking your child up and bring them around to the recovery area, where they will continue waking up.
What are the risks?

The risks vary from child to child. Most children having radiotherapy will have had anaesthetics before for procedures, operations or scans. We may have an idea of how they react to anaesthetic drugs and we may be able to use information from these previous anaesthetics to decrease the risks and reduce the unpleasantness.

Radiotherapy treatments often involve giving anaesthetics every day for several weeks. The drugs are short acting and there are no known problems from giving so many repeated anaesthetics. Generally although the risks are low, they are not zero. It is important that it is clear before we start the radiotherapy that the benefits of radiotherapy are greater than the risks from the anaesthetic.

It is important that you monitor your child after the general anaesthesia as it can cause sickness. This is particularly dangerous for a child whose airway may become obstructed by vomit.

Nil by mouth!

It is important that your child has an empty stomach before an anaesthetic. This is because there is a risk of the contents of the stomach spilling into and damaging the lungs when your child is anaesthetised. To achieve an empty stomach at the beginning of the anaesthetic your child should not:

- eat any food or cow’s milk within six hours
- drink any breast milk within 3 hours or formula milk within four hours (for children under 1 year of age only)
- drink any clear fluid (i.e. water or squash/juice without bits in) within 1 hour.
Medications
As a general rule we do not want to disrupt your child’s medications. However, we need to keep your child “nil by mouth”. We will discuss this with you before the first anaesthetic. Please let us know of any medication changes that are made.

Unwell, coughs and colds
The decision to proceed or not with the anaesthetic is a difficult one. We do not wish your child to miss a radiotherapy treatment but we do not wish to increase the anaesthetic risks. If the “cold” is minor then come to the Radiotherapy Department and we can discuss what to do. If the illness is more severe, then you may need to talk to your GP, your local paediatrician, or your oncologist. Let us know if your child is readmitted to hospital, so we can discuss whether or not we should postpone the treatment.
**Every weekday**

The radiotherapy treatment is booked for a series of weekdays. You will be told a start date and time. Please be sure that your child has not had anything to eat (see the earlier section on nil by mouth). Ideally two parents/guardians should bring your child on a daily basis to help with transport and caring for your child.

When you arrive at the Radiotherapy Department we will be setting up the anaesthetic equipment. There may be a short delay while the anaesthetic and radiotherapy machines are being checked. We will then call you and your child into the room. It is easier if your child is accompanied by only one parent.

We will ask you to sit down on the chair with your child on your knee and find the end of the Hickman line so that we can inject the anaesthetic drugs. When your child is becoming sleepy we may need you to help us lift them into position. We will then concentrate on your child and we would be grateful if you could return to the waiting area. At the end of the radiotherapy we will then bring your child to the recovery area and stay nearby while your child is waking up.

**Going home**

It is important that you stay with your child until the anaesthetic drugs have worn off. Your child may well be hungry when they wake up because they have missed their breakfast. They can start to eat and drink but may feel sick if they eat too much too quickly.

It usually takes about an hour and a half after treatment before you will be ready to leave. Ideally two parents/guardians should attend each appointment, so that one adult can drive home while the second adult can monitor your child. General anaesthesia can cause sickness and this is particularly dangerous for a child whose airway may become obstructed by vomit.
How you can help your child
You will know the best way to explain to your child what is going to happen. Both you and your child will be apprehensive and uncertain for the first few sessions. With time you will find it all becomes part of a routine and you will become more settled. This is likely to result in less anaesthetic being required and a faster wake up with less disruption to your lives. All children vary in what they mind and don’t mind about the procedure. Some children like the sensation of being anaesthetised while others dislike it.

Side effects
The risks and side effects from anaesthetics are low. Generally about one child in ten might experience a headache, sore throat, sickness or dizziness. Roughly one child in 100 (one person in a street) might be mildly allergic to one of the drugs that has been given. Approximately one child in 20,000 (one person in a small town) might develop a serious reaction (allergy) to the anaesthetic.
Further information
Further information about anaesthetics and risks is available online:

www.rcoa.ac.uk/childrensinfo
www.apagbi.org.uk/children-and-young-people
If you need an interpreter or would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.

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