UNIVERSITÄTS-
KINDERSPITAL
ZÜRICH

Anesthesia Procedure for Proton Therapy at Paul Scherrer Institute, Center for Proton Therapy

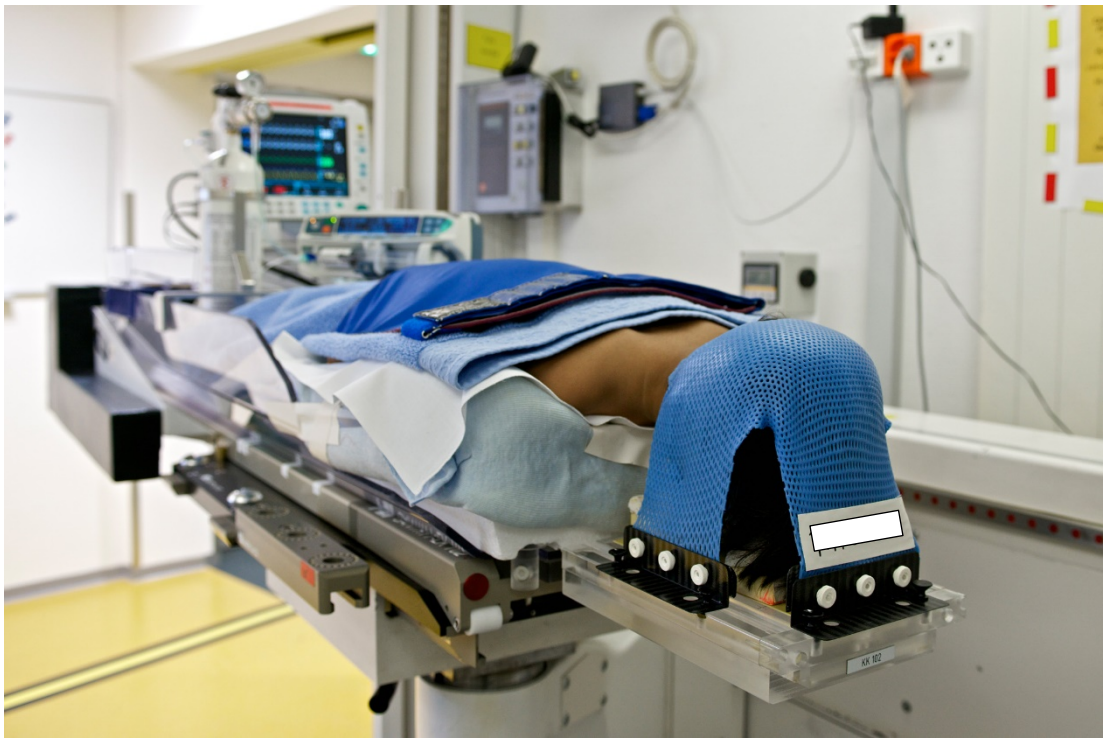
Children younger than six years old, as well as some older children who are incapable of lying still long enough, need to be sedated for their proton therapy sessions.
A total intravenous anesthesia (TIVA) under spontaneous breathing is performed.
As with any other anesthesia, the children must have fasted before the procedure; that is, at four hours beforehand they are allowed to take a small meal and up until two hours before the procedure, they are allowed clear liquids (water, tea, sweetened flavored water).
The children's waiting room is furnished especially for the interests and needs of our small patients and their families.

To begin the sedation, the children and their parents are picked up in the waiting room …

… and accompanied to the anesthesia room.

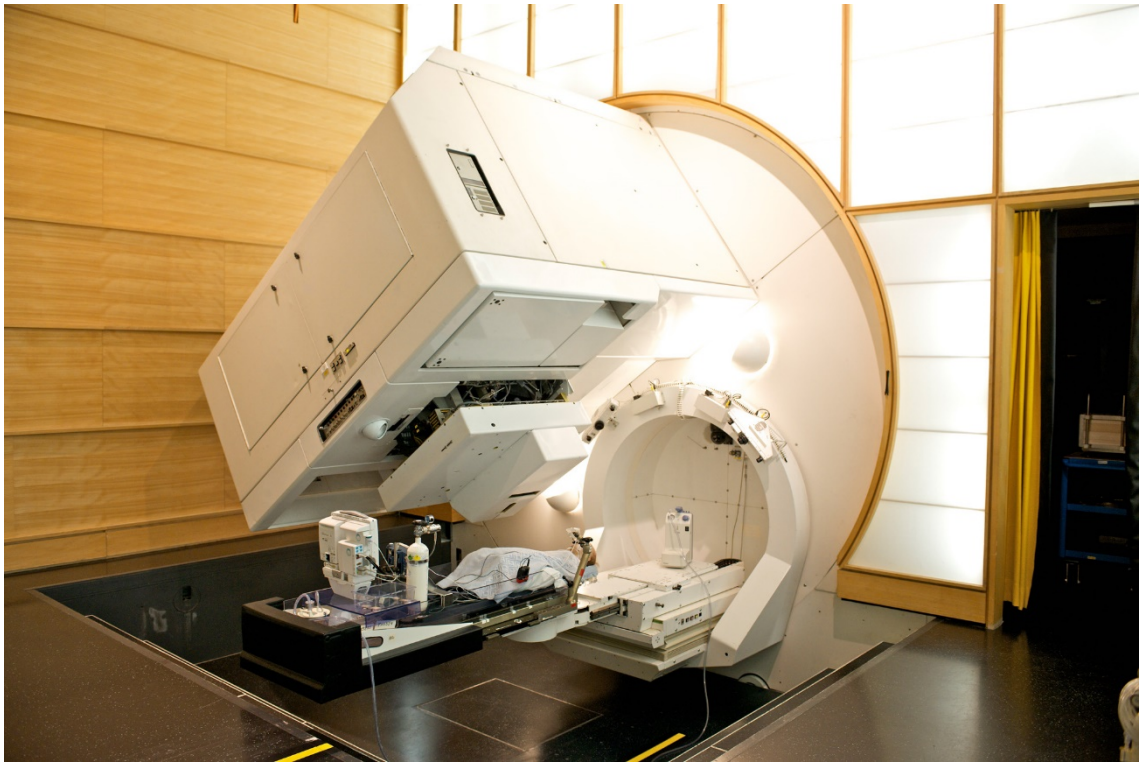
The child usually sits on a parent’s lap while sedation is induced. Finger puppets, “courage pearls” and stories help to build trust and to distract the child’s attention.

As soon as the child is asleep and the monitor (ECG, blood pressure, oxygen and CO_2 levels) is installed, the child can be positioned for treatment. According to the location of the tumor, the child is placed in either the face up or face down position and the head is fixed with either a mask or a so-called bite block.



After the correct position is radiologically confirmed, the child is transferred to the treatment room.

During treatment …



… the child is under visual observation via cameras. The vital statistics are transferred via WLAN to the monitor at the observation station.

After treatment the child is brought to the wake-up room, where the parents can be with their child.

Discharge takes place as soon as the child is completely awake and the release criteria are met.