



Atlantic Provinces Pediatric Hematology Oncology Network

Réseau d'oncologie et d'hématologie pédiatrique des provinces de l'Atlantique

5850/5980 University Avenue, PO Box 9700,

Halifax, NS, B3K 6R8, 1.902.470.7429, 1.888.470.5888

***Reviewed and approved by specialists at the IWK Health Centre, Halifax, NS and the
Janeway Children's Health and Rehabilitation Center, St John's, NL***

Guidelines for Mouth and Dental Care For Pediatric Oncology Patients and Families

APPHON/ROHPPA supportive care guidelines have been developed by appropriate Atlantic Provinces health professional specialists (physicians, pharmacists, nurses and other health professionals) using evidence-based or best practice references. Format and content of the guidelines will change as they are reviewed and revised on a periodic basis. Care has been taken to ensure accuracy of the information. However, any physician or health professional using these guidelines will be responsible for verifying doses and administering medications and care according to their own institutional formularies and policies and acceptable standards of care.

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Mouth and Dental Care Guidelines for Children and Adolescents Undergoing Cancer Treatment

Your child will visit the Pediatric Dentist at the IWK Health Centre or the Janeway Children's Health and Rehabilitation Centre soon after diagnosis.

Why do we need to see the dentist at the IWK Health Centre?

Chemotherapy drugs and/or radiation treatment will kill cancer cells. They may also harm the good cells on the inside of your child's mouth and blood cells that fight infection. Your child may not be able to fight infections at certain times during their treatment. It is important that the IWK or Janeway dentist checks your child's mouth to make sure that there are no cavities, infected teeth or loose teeth. These sources of germs could increase the chance of mouth infection during treatment. Braces or other devices need to be removed while your child is receiving cancer treatment.

The pediatric dentists and dental staff at the IWK Health Centre or Janeway Children's Hospital are trained to look after children with cancer and other blood problems. They will work with your child's other doctors and nurses to make sure that your child's mouth is as healthy as possible.

Will my child still visit our regular family dentist?

For most children, the dentist and dental staff at the IWK or Janeway will look after your child during their treatment. Your child will not need to see your family dentist until after treatment is finished. If your family dentist sees your child for any extra care, your dentist should call the IWK or Janeway dentist before doing any work. The IWK or Janeway dentistry office will let you know how often your child should visit them and will arrange appointments. The staff will try and coordinate dentist appointments with other planned visits to the IWK Health Centre or Janeway Children's Hospital, whenever possible. The IWK or Janeway dentist will send a report to your family dentist at the end of treatment. Your family dentist will then carry on with routine care.

Your child should be brushing their teeth twice daily with fluoride containing gel toothpaste using a soft toothbrush.

Is it safe for my child to brush their teeth when they are more susceptible to infections and mouth bleeding?

Cancer treatments can increase the occurrence of mouth sores and infections, as well as dental cavities. Regular and consistent mouth care can reduce the risk of all three.

What should my child use to brush their teeth?

- **Use a soft nylon brush** and replace it every three months or after an infection. Allow the toothbrush to air dry after each use. **AVOID** the use of toothettes (a sponge on a stick). They can scratch and tear the gums and do not clean the teeth very well.
- **Use gel toothpaste with fluoride.** A gel toothpaste is less likely to cause irritation to the mouth because it does not contain the cinnamon extract found in "cream" toothpaste.

To help prevent cavities, toothpastes should contain fluoride. For children less than three, use a rice grain portion of fluoridated toothpaste. For children three and over, use a pea size portion of fluoridated toothpaste.

Why do we need to use gel toothpaste?

- A gel toothpaste is less likely to cause irritation to the mouth because it does not contain the cinnamon extract found in “cream” toothpaste.

Chlorhexidine 0.12% mouth rinse should be used on the gums, teeth and skin inside the mouth two (2) times each day.

What is chlorhexidine and why is it recommended for good mouth care?

Your mouth is a place where germs often live. During cancer treatment your child may not be able to fight infections very well; therefore, these germs can cause infections. Some chemotherapy may cause sores in the mouth which can get infected. Mouth sores and gum infections can be painful and cause your child to stop eating and become quite sick. Chlorhexidine is a strong mouth rinse that can either kill germs that live in your mouth or stop germs from sticking to the teeth and gums. It will help prevent mouth infections. If your child does get an infection, it may decrease how severe the infection is and how long it lasts.

Where will I get chlorhexidine mouth rinse?

When you go home from the IWK or Janeway, the pediatric dentist or doctor will give you a prescription for chlorhexidine 0.12% mouth rinse. You can have this filled at your local drugstore. It is important that your pharmacy gives you a brand of chlorhexidine (*such as Oro-X® with chlorhexidine 0.12% MIC*) **that does not contain alcohol**. These should not be used, because alcohol can dry and damage the skin on the inside of the mouth and cause more damage to this area of the mouth.

How should chlorhexidine be used?

The best way to use chlorhexidine is to **rinse the mouth with it and spit it out (swish and spit)**. Older children should put about 10 mL (two teaspoons) of chlorhexidine in their mouth, swish it around for 60 seconds (one minute), then spit it out.

If your child **cannot “swish and spit”**, you can apply chlorhexidine on the teeth, gums and inside of the mouth by using a soft toothbrush or a gauze pad soaked in the mouth rinse. Your pediatric dentist, dental assistant or nurse can show you how to do this.

The length of time the chlorhexidine is in the mouth is more important than the amount of chlorhexidine used. The chlorhexidine works best when it stays on the teeth and in the mouth for a full minute. If a child only rinses for 30 seconds (½ minute) they can do it two times to make a total of one minute.

Very young children are usually not very good at rinsing and spitting, and often swallow some. If chlorhexidine is swallowed, it is not harmful and will pass out of the body when they go to the bathroom.

Have your child **wait at least 30 minutes after the mouth rinse to eat or drink.**
Does it matter when my child uses chlorhexidine?

Your child should wait **at least 30 minutes (½ hour) after brushing teeth** before using chlorhexidine. Both the toothpaste and the chlorhexidine won't work as well if they are used too closely together.

Can my child use chlorhexidine with other medications?

If your doctor or dentist has prescribed **other mouth rinses** please check with your health care team for instructions as to when and how to use them. Waiting at least 30 minutes between different rinses will help with the effectiveness of each. Also the order in which rinses are used also helps to make the mouth care as effective as possible.

If your child is also using clotrimazole liquid (Canesten®), fluoride rinse (Oral B®), or nystatin (Mycostatin®, Nilstat®, etc.), then your child should use these products before chlorhexidine. Your child must wait 30 minutes before using chlorhexidine.

Does chlorhexidine have any side effects?

Chlorhexidine has no serious side effects. There are a few minor side effects, but not all children will have them. Some of these minor side effects are:

- **Unpleasant Taste:** Many children do not mind the taste of chlorhexidine, but some do not like the taste. If the taste is a reason for avoiding mouth rinses, ask your pharmacist if there are other flavours available.
- **Altered Taste:** Sometimes chlorhexidine can leave a bad taste in the mouth. It can make some foods taste different from before. This is not a lasting change and will go away when treatment is finished.
- **Teeth Stains:** Chlorhexidine may leave brown stains on the teeth. Your IWK or Janeway dentist will remove these at an appropriate time during your child's overall treatment.

How do I store chlorhexidine mouth rinse?

It should be stored at room temperature out of reach of children.

When can my child stop using chlorhexidine?

Chlorhexidine should be used during all the intensive phases of treatment. The doctor may say the chlorhexidine can be stopped during less intensive treatment if your child's blood counts are good. Please check with the IWK or Janeway dentist before you stop using the chlorhexidine. Chlorhexidine is also very helpful in fighting dental disease. Your IWK or Janeway dentist may want your child to continue using it after treatment is finished if they are at high risk for cavities.

What can I do if my child develops a mouth infection?

- Avoid spicy food, hard food or hot/cold drinks that might irritate the mouth.
- Acetaminophen (Tylenol®) may be used for pain, **in consultation with your health care team**. Remember that the use of acetaminophen can hide the presence of a fever. Some children may need codeine or morphine ordered by the doctor.
- Do not eat apples, oranges or grapefruit, or drink apple, orange or grapefruit juice. They may irritate the mouth.
- Use a straw when drinking.
- Have all mouth sores seen by a doctor.

Contact your doctor or family care coordinator (FCC) if:

- your child is not eating or drinking properly
- your child has a fever
- mouth sores are worse
- pain is not controlled with acetaminophen (Tylenol®).

Should my child floss his/her teeth?

***Please consult your IWK or Janeway dentist regarding flossing of teeth.

References

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