



Oral Mucositis

Created in 2014.01
 Revised in 2022.11
 English version in 2022.11

Radiation therapy or chemotherapy may cause mucositis (mucous membrane-redness or swelling or ulcers) in your mouth. Oral mucositis might cause severe pain, it might even affect swallowing, eating, talking and the quality of life.

1. Why is oral care important?

Oral mucositis might happen during 1-2 weeks of chemotherapy or 2-3 weeks of radiation therapy, symptoms such as tissue swelling in the mouth or ulcers will happen during then. Mouth care can help relieve symptoms such as pain, discomfort and bad breath.

2. What you should prepare: A mirror, a flashlight (or cellphone) and cotton swabs.

3. Oral checking method:

- (1) Facing the mirror, use a flashlight to observe if there is redness or white spots or ulcers in the mouth, gums, jaw, tongue, throat, lips, or inside the cheeks.
- (2) If the white dots can't be removed by the cotton swab, please inform medical staffs, it might be caused by bacteria or fungal infection.

4. Stages of Oral Mucositis:

Grading	Grade 1	Grade 2	Grade 3	Grade 4
Suitable Equipment	Asymptomatic or mild symptoms; intervention not indicated	Moderate pain or ulcer that does not interfere with oral intake; modified diet indicated	Severe pain; interfering with oral intake	Life-threatening consequences; urgent intervention indicated
Toothbrush	Soft-bristled toothbrush	Soft-bristled toothbrush, if bleeding continues > 2 mins please switch to mouth care swabs.		Cotton Swabs
Toothpaste	Use a toothpaste with fluoride	Mouth wash only.		
Dental floss	Once a day	Don't use dental floss.		
Mouth wash	Don't use rinses that have alcohol in them			
Cleaning Frequency	2-4 times/day After meal	Every 1-2 hours		
Wearing dentures	Ok	Not allowed.		

- (1) When to brush your teeth: Before breakfast, before bed and after meals. If there is no pain please brush your teeth at least twice a day.
- (2) How to brush your teeth: The upper row of teeth brush from top to bottom, and the lower row of teeth brush from bottom to top. Every tooth, tooth gap, gums, and missing tooth surface must be brushed. Each time brush 2-3 teeth at the same time inner side of the tooth same as above. Brush your teeth at least 90 seconds.
- (3) You can put your toothbrush in warm water for 30 minutes before use, to soften the bristles, please change your toothbrush at least once a month, and avoid using electric toothbrush because it might damage the gums.
- (4) Toothpaste: Use neutral toothpaste without particles and fluoride, because the flavoring substances will irritate the gums.
- (5) Dental floss: If the platelet count is greater than 50,000/uL, it is recommended to use dental floss to clean the teeth once a day.
- (6) How to remove tongue coating: Please use a soft-bristled toothbrush or mouth care swabs to brush your tongue twice a day, it helps with reducing mouth flora gathering. If the tongue coating is hard to remove, you may use 3% hydrogen peroxide with baking soda solution to clean your tongue.
- (7) When to do oral care: Rinse your mouth with the mouthwash your doctor prescribed every 4 hours, before and after meals. If you have severe oral mucocitis please clean your mouth every 2 hours, gargle for at least 30 seconds, avoid mouthwash that contains alcohol, due to alcohol content, it is easy to dry the oral mucosa and rinse your mouth with room temperature or cold mouthwash.
- (8) Denture Care: Please remove your denture before performing oral care, remember to clean your denture before and after meals, also before sleep, and allow the gums to rest for at least 8 hours.
- (9) Lip care: Use water-soluble lip balm to moisturize your lips.

5. Mouthwashes(Don't use rinses that have alcohol in them), ointments and powders:

(1) Types of and brewing method:

1. Baking soda solution or normal saline: Use one teaspoon of baking soda and salt, mix with 100ml of water. This can help maintain alkalinity in your mouth, to decrease the amount of bacteria.
2. Parmason: Please read the instructions before use, if necessary, diluted according to doctor's orders.
3. Better iodine mouthwash: Please dilute as your doctor's prescription.
4. Diluted 3% hydrogen peroxide: 1ml of 3% hydrogen peroxide mixed with 5ml of water.
5. Others: Tea can reduce bad breath, licorice water or vitamin C can prevent dryness, lemon water can help with salivation.

6. Enoxolone Gingival Paste: Prevent gum inflammation or bleeding, please follow your doctor's prescription.

(2) Intraoral gel or powders for oral ulcers: Clean your mouth before applying medication.

(3) Antifungal drugs: Add 30-50cc of water, swallow after gargling 5 minutes.

6. Pain care: Your doctor might provide you pain killers, or adding painkillers into your mouthwash, use mouthwash 10-15 minutes before you eat or clean your mouth to relief the pain.

7. Daily life precautions:

(1) Avoid alcohol, cigarettes, beetle nuts or spicy food, try not to eat deep fried or solid food.

(2) Water intake should at least 2000-3000ml/day if no other contraindication, you can also chew on bubble gum or food (such as apples, carrots or celery) to help salivation.

(3) Lip balms can be used while lips are dry.

(4) Chose food that are high in calories and protein or liquids, such as meat, dairy products, pudding or ice cream, you can also ask your caregivers, nutritionists will be consulted to help you know what you can eat.

(5) The sensitivity of bitterness might increase, you can try to avoid bitter fruits or vegetable, you can add lemon or sugar in your meals to add some flavor.

If you have any questions or suggestions, please contact us. We are very willing to help. Our contact telephone number: Taipei main branch Hospital: (02)25713760 ; Hsinchu branch: (03)5745098 ; Taitung branch: (089) 310150 ext:624. Time of consultant: 9:00 am.~12:00 noon, 2:00 pm.~5:00 pm Monday ~ Friday.

May God Bless You