
MUCOSITIS

Definition

- Is the inflammation, ulceration or haemorrhage of the mouth and throat secondary to chemotherapy, radiation or myelosuppression.
- Occurs in ~ 40 % of patients receiving chemotherapy.
- Usually lasts for 3 weeks and may start as early as Day 5 of chemotherapy depending on the agent and intensity of chemotherapy.
- Not immediately life threatening however associated with a lot of pain.

Etiology

- Secondary to chemotherapy, radiation and myelosuppression.
- Risk factors include, ALL, AML, poor oral health, specific chemotherapy agents (alkylating agents, antimetabolites, antibiotics)
- Combination therapy
- Dose and schedule of chemotherapy.

Prevention

- Maintain good oral hygiene to decrease risk and severity of mucositis.
- Encourage use of regular soft toothbrush according to age 2-3 times /day.
- If mucositis develops use normal saline rinse 2-3 times /day.
- Avoid alcohol based mouth washes, spicy, hot or very cold food.

Presentation

- Erythema, inflammation, ulceration and haemorrhage of the mouth and throat.

WHO classification (mucosal appearance)

Grade 1. Soreness+/- erythema.

Grade 2. Erythema but able to eat and drink.

Grade 3. Erythema and not able to take solids but able to tolerate fluids orally.

Grade 4. Unable to tolerate both solids and fluids orally.

Differential Diagnosis

- Bacterial, viral or fungal infection.
- Typical oral flora often cause of infection may also be caused by opportunistic organisms.
- During neutropenia this may lead to sepsis.

Management.

1. Rule out possible cause and treat appropriately.
 - Oral thrush – use fluconazole 6mg/kg stat then 3 mg/kg.
 - Significant ulceration – Tinidazole or flagyl and Amoxicillin.
 2. Continue mouth hygiene.
 3. Pain
 - use codeine or morphine orally if tolerated
 - Topical analgesics if available.
- Mucositis of WHO Grade 1 and 2 may be treated as out patients with daily reviews and oral antibiotics.
 - Mucositis of WHO Grade 3 and 4 should be admitted for IV antibiotics and supportive IV fluids.
 - Chemotherapy should be put on hold for Mucositis WHO Grade 2-4.

References

1. McGuire D 2006, *The role of basic oral care and good clinical practice principles in the management of oral mucositis*, *Support Cancer Care* (2006) 14: 541-547.
2. Oussama A 2010, *Supportive Care in Paediatric Oncology*, Jones and Bartlett Publishers, India 2010.