# Protocol for the treatment of oral candida at E.M.H.

## Introduction

Candidosis and Xerostomia [a dry mouth] are the two most common oral problems found in palliative care.

Cancer patients are very susceptible to oral candidosis as their immune system is dampened due to either the disease and / or treatment. Oral candidosis is particularly worrying to this group of patients as spread to a systemic infection may lead to death. Treatment of oral candidosis is therefore a key aspect in their management.

## Description

There are several different types of oral candida infections:

- **Acute pseudomembranous candidosis** - The acute form in which white meshes and patches on the mucous membranes of the cheek, tongue or floor of the mouth are found. The patient's gums are raw, erthematous or bleeding.
- **Acute atrophic candidosis** - Without the white plaques, the oral mucosa and particularly the tongue is red, oedematous and painful.
- **Chronic atrophic candidosis** - Chronic erythema and oedema of the oral mucosa are present. This type may be seen in denture wearers. The reddened painless area is usually limited to the oral mucosa covered by the denture.
- **Angular chelitis** - Bilateral erythematous lesions at the corners of the mouth that often crack and bleed, producing significant discomfort.

## Management

- Assessment of the oral cavity should be carried out on admission before any treatment is carried out and daily thereafter.

- Be able to recognise oral candida infection.

- Remember oral candida infection may be the result rather than the cause of mouth problems, indicating that general mouth hygiene / nursing care is as important as using , anti fungal treatments.

## Treatment for all types of candida

- Treat initially with Nystan oral suspension [100,000 units/ml]. 1-5 mls qds. Treat for 5 - 14 days depending on the severity of the infection. The patient should be advised at the start of the treatment, to use the solution after meals and prior to retiring to bed. Remove dentures first. Hold the solution in their mouths for as long as possible usually 1-2 minutes. Nurses can initiate this treatment. Alternatively, Nystan pastilles [100,000 units / pastille], 1 pastille qds. can be used depending on the patients preference. Oral Nystan has the advantage of being a local therapy without the risk of systemic side effects. **Side effects**:- Diarrhoea if taken in high doses, nausea and vomiting.

- If the above treatment is not effective or the infection is particularly severe, use Fluconazole /Diflucan [150 mg po as a single dose]. It is available both as 50mg capsules and as a suspension [50mg in 5mls ]. Please note Fluconazole can react with certain drugs, e.g. Anticoagulants, Theophylline, Cyclosporin, Phenytoin and Casodex. **Side effects**:- Headache, nausea and vomiting, rash, hepatitis [rare]. Part of its action is dependent on the fact that it is secreted into the saliva, so it is less effective in patients with a dry mouth.

- Soak non metal dentures over night in a dilute chlorine releasing solution [Milton solution]. Brush metal dentures with providine iodine solution.

## Other Agents

- **Water**:- is a very good mouth wash, moistening, softening, freshening and stimulating. The patient may appreciate carbonated water or tonic water. The effervescent action helps to clean the mouth.
- **Normasol sachets:-** useful after radiotherapy to the oral cavity and neck.
- **Diflam /Benzdamine mouthwash:-** consists of 0.15% benzdamine hydrochloride. It contains a topical anaesthetic, has anti inflammatory and antimicrobial properties. Useful for patients who have a sore oral cavity. The patient may rinse or gargle with 15ml [diluted with half a cup of water, if preferred by the patient] every $1\frac{1}{2}$ - 3 hours or as required.
- **Bonjela, Teejel**:- are all lignocaine gels used when the mucosa is painful. It can cause pain on application and sometimes the resultant numbness can be equally unpleasant.
- **Ascorbic acid tablets:-** can be made into a solution mouthwash or drink such as Redoxan effervescent vitamin C which comes in a variety of flavours. A fragment of tablet can be placed on the tongue and left to dissolve, leaving a pleasant tasting residue. This is very effective if the oral cavity is dirty.
- **Synthetic saliva**:- the constituents resemble those of natural saliva. The product may be used as often as required for dry mouths without any detrimental effect. Synthetic saliva is particularly useful for patients with impaired saliva production.
- **Vaseline**:- may be used sparingly on the lips to create an occlusive oil film that prevents the loss of moisture by evaporation.
- **Orabase**:-[carboxymethylcellulose] protects painful ulcers and may also be soothing to angular sores.

## Review of drugs:-

A review of the patients medication is extremely important, as certain drugs may cause oral candidosis:-

Broad spectrum antibiotics
Corticosteroids
Cytotoxics
Immunosuppressives
Drugs which cause a dry mouth.

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