Oropharyngeal Candidiasis Guideline

Background

- One third of the general population are carriers of oral yeast. The prevalence is significantly higher in patients with advanced cancer (50-90%)¹
- Oropharyngeal candidiasis is common in palliative care patients (13-30%)¹
- It should be noted that many patients with oropharyngeal candidiasis have concurrent oesophageal infection
- Factors which increase the risk of developing oropharyngeal candidiasis include; poor performance status, dry mouth, dentures, diabetes, chemotherapy and topical (rather than oral or parenteral) antibacterials/corticosteroids
- There is increasing resistance to azole antifungals (Itraconazole – 21%, Fluconazole – 22%, Ketoconazole – 8% and Voriconazole – 3% nationally, with significant local variations)¹
- Oropharyngeal candidiasis can be divided into syndromes:
  1. Classic thrush
  2. Acute atrophic candidiasis (nonspecific atrophy of the tongue)
  3. Chronic atrophic candidiasis “denture sore mouth”
  4. Candida leukoplakia (firm, white plaques of cheeks, lips and tongue that run a protracted course)
  5. Candida oesophagitis (may occur with or without thrush)

Signs and Symptoms

- May be asymptomatic
- Signs: Adherent white plaques on tongue or mucus membranes, smooth red tongue, dry mouth, angular cheilitis.
- Symptoms: Dry mouth, loss of taste or impaired taste, soreness and dysphagia.

Management of Oropharyngeal candidiasis

First line treatment:

- **Non immunocompromised and no suspicion of oesophageal involvement:** Nystatin 5mls of 100,000 units/mL QDS for 7 days or until 48 hours after the lesions have disappeared. Patients should be advised to hold the Nystatin against lesions for at least a minute before swallowing. Food and drink should be avoided for 1 hour after administration.

- **Immunocompromised or if oesophageal involvement suspected:** Fluconazole 100-200mg OD for 7-14 days. There is no evidence to support the use of a single dose of 150mg Fluconazole in oral candidiasis.

Second line treatment:

- For patients who have not responded to Nystatin, Fluconazole 100-200 mg daily for 7-14 days
- For patients who have not responded to Fluconazole at 100mg OD, Itraconazole solution 200mg OD for 14 days.
- If symptoms persist despite the above, swabs should be taken and microbiology contacted for advice
- Patients with persistent dysphagia or other symptoms of oesophagitis may need further investigation and systemic antifungal therapy
**Miconazole gel (daktarin)**

Miconazole oral gel is used in some centres, and is documented in the PCF for treatment of oral candidiasis. This should not be used first line and MHRA guidance suggests systemic absorption of the oral gel is sufficient for CYP450 hepatic enzyme inhibition and drug interactions. (Please see azole interactions below)

**Dentures**

Should be cleaned thoroughly at least once a day with a brush. Dentures should be soaked overnight in Chlorhexidine for the duration of the treatment. Dentures must then be thoroughly rinsed before re-insertion. Failure to adequately sterilise the dentures will result in failure of antifungal treatment. Toothbrushes should be replaced.

**Renal Impairment**

- The BNF recommends a normal initial dose of Fluconazole, followed by a dose reduction of 50% for patients who have an eGFR of <50mL/min/1.73m²
- Itraconazole should be used with caution in patients with an eGFR 30-80mL/min/1.73m² and should be avoided if eGFR <30mL/min/1.73m²

**Other Cautions**

- See BNF for full list
- Hepatotoxicity: may occur with fluconazole, itraconazole and ketoconazole. Patients should have their LFTs checked prior to starting treatment. Patients receiving high doses, prolonged treatment or pre-existing liver disease should have their LFTs monitored during treatment
- Interactions: The azoles interact with many different drugs that are commonly used at the hospice. In particular, they can enhance the effects of Alfentanil, Warfarin and Midazolam.
- Itraconazole should be used cautiously in patients with a high risk of heart failure, and avoided in patients with known ventricular dysfunction or history of heart failure.

**Vitamin C and Tongue Cleaning**

Vitamin C is not a treatment for oral candidiasis but can be useful to help lift plaques or thick coating on the tongue. A quarter of a dispersible tablet should be placed directly on the tongue and allowed to dissolve. It can be used up to 3 times a day. In these patients, it is also worth considering gentle cleaning of the tongue with a baby toothbrush.

**References**

1. Palliative Care Formulary. 6th Edition. Editors Robert Twycross, Andrew Wilcock, Paul Howard

7. Scottish Palliative Care Guidelines. NHS Scotland. Mouth Care.  
   https://www.palliativecareguidelines.scot.nhs.uk/guidelines/symptom-control/Mouth-Care.aspx