OSCE STATION DEVELOPMENT

Obstetrics and Gynecology

Station 2016: Recurrent Vulvovaginal Candidiasis

STATION SCENARIO

In this STRUCTURED ORAL station, the candidate will be asked to discuss the diagnosis and management of recurrent vulvovaginal candidiasis.

OBJECTIVES TESTED

The candidate is to demonstrate an organized approach to a patient with persistent vaginal discharge and irritation unresponsive to over-the-counter therapies.

CanMEDS OBJECTIVES

- Medical Expert

DOMAINS and SUBJECT AREAS

2.1.13.1. Vaginal and vulvar infections

REFERENCES

1. SOGC Clinical Practice Guideline, No. 320, March 2015
2. Canadian Guidelines on Sexually Transmitted Infections, Section 4, 2010 (updated 2014)

STATION REQUIREMENTS

RESOURCES, PEOPLE and EQUIPMENT

1. Table and 2 chairs
2. Pencils

KEYWORDS

- Vulvovaginitis
- Recurrent vulvovaginal candidiasis
INSTRUCTIONS FOR EXAMINER

After introducing yourself and verifying the candidate’s identity, follow the marking scheme. Please use the INTRODUCTORY STATEMENT and ask the questions as stipulated. Where applicable, provide the answers or standardized test results indicated when the candidate asks the appropriate question. If the candidate does not answer a question as expected, and the correct answer is needed for the next question, use the prompt as indicated. Record (please print) inappropriate or equivocal responses in the right margin. When the candidate has left the station, sum the marks obtained at the end of each question and for the complete station. Total marks must not exceed 50.

INSTRUCTIONS TO CANDIDATE

This is a STRUCTURED ORAL station.

A 26 year old nulligravid woman is referred to you regarding recurrent vaginal discharge with severe vulvar and vaginal irritation for the last six years. She experiences symptoms most months of the year. The severity of the irritation is interfering with her sleep and her quality of life. She had previously obtained transient relief from over-the-counter antifungals but they are no longer effective.

Based on the above clinical information please be prepared to answer the examiners questions regarding assessment and management of this patient’s symptoms

You have 13 minutes to complete this station.
**EXAMINER’S MARKING GUIDE AND SCORING SHEET**

<table>
<thead>
<tr>
<th>What additional information do you require to manage this patient’s symptoms</th>
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<tbody>
<tr>
<td>• Nature of ‘irritation’ – burning, pruritus</td>
</tr>
<tr>
<td>• Associated discharge – colour, consistency, odour</td>
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<tr>
<td>• Relations to menses – before, during, unrelated</td>
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<tr>
<td>• Sexual activity – dyspareunia, use of latex, spermicides</td>
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<tr>
<td>• Risk factors for VVC – Diabetes, OCP, antibiotics, pregnancy, immunosuppression, corticosteroids</td>
</tr>
<tr>
<td>• Skin conditions – lichen sclerosus, psoriasis</td>
</tr>
<tr>
<td>• Environmental factors – perineal hygiene, douching</td>
</tr>
<tr>
<td>• Treatments to date – OTC, metronidazole, lactobacilli, acidophilus</td>
</tr>
</tbody>
</table>

*Provide the candidate with the following additional information:*

| • Patient clarifies ‘irritation’ as itchiness of vulva and vagina |
| • Copious amount of white to yellow discharge, no odour |
| • Superficial dyspareunia – aggravated by latex condoms & spermicide |
| • Currently on low dose combined OCP |
| • No significant medical history including diabetes or skin conditions |
| • No recent antibiotics or other medications |
| • Tried diflucan, canesten, monistat, flagyl at various times |
| • Douching daily with baking soda, no bubble baths or lotions, wears white cotton underwear, uses pads only as tampons uncomfortable |

**What is the differential diagnosis for this patient?**

| • VVC |
| • Trichomoniasis |
| • Squamous hyperplasia, lichen sclerosus, lichen planus |
| • Irritant or allergic dermatitis |
| • Other STD (GC, chlamydial cervicitis) |

**Subtotal**
On examination you observe diffuse erythema of the vulva and vaginal walls with satellite lesions on the perineum. The vaginal discharge is inhomogeneous clumpy white and adherent to the walls. There are no ulcers or focal lesions seen.

**What investigations are appropriate**

- **Basic Investigations**
  - Wet prep
  - Gram stain
  - Whiff test
  - pH testing

- **Advanced investigations**
  - Culture for yeast speciation for atypical candida species
  - Serum glucose, HbA1c
  - HIV screening, CD4 count, viral load

A wet mount confirms the presence of candida, what is your diagnosis and what are your management recommendations

**Diagnosis:**

- ‘Recurrent’ vulvovaginal candidiasis [key observation is that it is recurrent]

**Management:** [only one regimen is required]

- Candidate should discuss induction and maintenance approach to management
- Induction with oral fluconazole 150mg PO q3d x 3 or azoles for 7-14 days or boric acid 300-600mg daily for 14 days
- Maintenance therapy for at least six months consisting of:
  - Oral fluconazole 150mg weekly
  - Boric acid 5 days (with menses) per month
  - Ketoconazole 100mg daily
  - Clotrimazole monthly
  - Itraconazole monthly

- Consider additional measures such as:
  - Carbohydrate reduction
  - Acidophilus
  - Discontinue douching
Avoid feminine hygiene products that are irritating

*If the candidate states over the counter antifungals, prompt for other more details or other suggestions*

**A culture report specifies that there is heavy growth of candida glabrata, what is your management recommendation?** [any one of these regimens are acceptable]

- Boric acid 600 mg capsule pv once a day for 14d
- Flucytosine cream 5 g pv once a day for 14d
- Amphotericin B 50 mg suppository pv once a day for 14d
- Flucytosine 1 g PLUS amphotericin B 100 mg (combined in a lubricating jelly) pv once a day x 14d
- If recurrent:
  - Retreat with boric acid 600 mg capsule intravaginally once a day for 14 days FOLLOWED BY alternate day boric acid for several weeks or 100,000 units of nystatin vaginal suppositories once a day for 36 month

**The patient remains symptomatic and has become pregnant, what is your management recommendation now?**

- Oral flucanazole and boric acid contraindicated in pregnancy
- Use of alternative such as azoles