DHA TELEHEALTH CLINICAL GUIDELINES FOR VIRTUAL MANAGEMENT OF VAGINAL CANDIDIASIS - 10

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INTRODUCTION

Dubai Health Authority (DHA) is the responsible entity for regulating, licensing and monitoring health facilities and healthcare professionals in the Emirate of Dubai. The Health Regulation Sector (HRS) is an integral part of DHA and was founded to fulfil the following overarching strategic objectives:

Objective #1: Regulate the Health Sector and assure appropriate controls are in place for safe, effective and high-quality care.

Objective #2: Position Dubai as a global medical destination by introducing a value-based, comprehensive, integrated and high-quality service delivery system.

Objective #3: Direct resources to ensure happy, healthy and safe environment for Dubai population.

ACKNOWLEDGMENT

This document was developed for the Virtual Management of Vaginal Candidiasis in collaboration with Subject Matter Experts. The Health Policy and Standards Department would like to acknowledge and thank these professionals for their dedication toward improving the quality and safety of healthcare services.

The Health Regulation Sector

Dubai Health Authority

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EXECUTIVE SUMMARY

Telehealth is based on Evidence Based Practice (EBP) which is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of the individual patient. It means integrating individual clinical expertise with the best available external clinical evidence and guidelines from systematic research.

EBP is important because it aims to provide the most effective care virtually, with the aim of improving patient outcomes. As health professionals, part of providing a professional service is ensuring that practice is informed by the best available evidence.

This guideline is presented in the format comprising of clinical history/symptoms, differential diagnosis, investigations and management. Identification of 'Red Flags' or serious conditions associated with the disease is an essential part of this telehealth guideline as it aids the physician to manage patients safely and appropriately by referrals to ER, family physicians or specialists for a face to face management.

Vaginal candidiasis is a yeast infection of the lower female reproductive tract. It is a common yeast infection that affects most women at some point. It may be unpleasant and uncomfortable but can usually be treated with medication.

However, for some women, vaginal thrush can be difficult to treat and keeps coming back. Vulvovaginal candidiasis is not considered a sexually transmitted disease.

The main objective is to assist practitioners in the telemedicine management of uncomplicated Vaginal Candidiasis. This guideline offers recommendations on the treatment regimens,

diagnostic tests and referral criteria needed for the effective management of Vaginal Candidiasis via telemedicine.

DEFINITIONS/ABBREVIATIONS

Virtual Clinical Assessment: Is the evaluation of the patient's medical condition virtually via telephone or video call consultations, which may include one or more of the following: patient medical history, physical examination and diagnostic investigations.

Patient: The person who receives the healthcare services or the medical investigation or treatment provided by a DHA licensed healthcare professional.

ABBREVIATIONS

DHA	:	Dubai Health Authority
EBP	:	Evidence Based Practice
ER	:	Emergency Room
HIV	:	Human Immunodeficiency Virus
IUDs	:	Intrauterine Devices
PV	:	Per vagina
PID	:	Pelvic Inflammatory Disease

1. BACKGROUND

1.1. Vaginal candidiasis is the second most common cause of vaginitis symptoms (after bacterial vaginosis) and accounts for approximately one-third of vaginitis cases. The prevalence of vaginal candidiasis is difficult to determine because:

1.1.1. The clinical diagnosis is often based on symptoms and not confirmed by microscopic examination or culture

1.1.2. The incidence of a single or sporadic infection increases with age up to menopause and is higher in African-American women than in other ethnic groups

1.1.3. The disorder is uncommon in postmenopausal women unless they are taking estrogen therapy. It is also uncommon in prepubertal girls, in whom it is frequently over diagnosed.

1.2. The infective organism is a fungus that reproduces by budding.

1.2.1. 80 - 92% of cases are due to Candida albicans

1.2.2. Other organisms include Candida glabrata, Candida tropicalis, Candida krusei and Candida parapsilosis

1.3. Candida is a normal commensal organism in the vagina

2. SCOPE

2.1. Telehealth services in DHA licensed Health Facilities.

3. PURPOSE

3.1. To support the implementation of Telehealth services for patients with complaints of vaginal candidiasis in Dubai Health Authority (DHA) licensed Health Facilities

4. APPLICABILITY

4.1. DHA licensed physicians and health facilities providing Telehealth services.

4.2. Exclusion for Telehealth services are as follows

4.2.1. Emergency cases where immediate intervention or referral is required.

4.2.2. Prescribe Narcotics, Controlled or Semi-Controlled medications.

5. RECOMMENDATIONS

5.1. Virtual Clinical Assessment

5.1.1. Vaginal candidiasis is the second most common cause of vaginitis symptoms (after bacterial vaginosis) and accounts for approximately one-third of vaginitis cases. The prevalence of vaginal candidiasis is difficult to determine because:

a. The clinical diagnosis is often based on symptoms and not confirmed by microscopic examination or culture

b. The incidence of a single or sporadic infection increases with age up to menopause and is higher in African-American women than in other ethnic groups

c. The disorder is uncommon in postmenopausal women unless they are taking estrogen therapy. It is also uncommon in prepubertal girls, in whom it is frequently over diagnosed.

d. The infective organism is a fungus that reproduces by budding

5.1.2. 80-92% of cases are due to Candida albicans.

5.1.3. Other organisms include Candida glabrata, Candida tropicalis, Candida krusei and Candida parapsilosis

5.1.4. Candida is a normal commensal organism in the vagina.

6. RISK FACTORS

6.1. Diabetes mellitus - Women with diabetes mellitus who have poor glycemic control are more prone to vaginal candidiasis than euglycemic women

6.2. Antibiotic use - Use of broad-spectrum antibiotics significantly increases the risk of developing vaginal candidiasis

6.3. Increased estrogen levels – vaginal candidiasis appears to occur more often in the setting of increased estrogen levels, such as oral contraceptive use, pregnancy, and estrogen therapy

6.4. Immunosuppression – Candidal infections are more common in immunosuppressed patients, such as those taking glucocorticoids or other immunosuppressive drugs, or with human immunodeficiency virus (HIV) infection

6.5. Contraceptive devices – Vaginal sponges, diaphragms, and intrauterine devices (IUDs) have been associated with vaginal candidiasis, but not consistently. Contraceptives may predispose to recurrent vaginal and vulval candidiasis

7. CLINICAL HISTORY

7.1. Typical symptoms include:

7.1.1. Pruritus vulvae - itching and soreness around the entrance of the vagina

7.1.2. Vaginal discharge – White, 'cheesy' discharge. The discharge is non-offensive. Foul-smelling or purulent discharge suggests bacterial infection. The discharge may be thin and watery

7.1.3. Dyspareunia

7.1.4. Dysuria

7.2. Symptoms tend to be exacerbated premenstrually and remit during menstruation.

7.3. Other relevant history which need to be taken includes:

7.3.1. Age of the patient

7.3.2. Onset

7.3.3. Duration

7.3.4. Type of discharge

7.3.5. Associated symptoms... Itching, soreness etc

7.3.6. First episode or recurrent

7.3.7. Menstrual history

7.3.8. Abnormal P.V. bleeding

7.3.9. Pregnancy

7.3.10. Past medical history including history of diabetes mellitus

7.3.11. Immunocompromised

7.3.12. Medication use

a. Steroids

b. Broad spectrum antibiotics

c. OCPs with estrogen

7.3.13. Sexual history

7.3.14. Personal history

7.3.15. Hygiene history

7.3.16. Type of clothing

7.3.17. Use of soaps and douches

8. RED FLAGS

8.1. Recent change in sexual partner

8.2. Blood stained discharge

8.3. Post-coital bleeding

8.4. Associated lower abdominal pain and fever

8.5. History of intermenstrual bleeding

8.6. Foul smelling discharge

9. DIFFERENTIAL DIAGNOSIS

9.1. Physiological

9.1.1. Physiological causes are common and consist of cervical mucus, local bacterium, secretions and menstrual fluid. In women of reproductive age, fluctuating levels of oestrogen and progesterone contribute to this. It is generally non-offensive and often white or clear.

9.2. Bacterial vaginosis

9.2.1. Bacterial vaginosis tends to present with a fishy-smelling discharge and is caused by an overgrowth of anaerobic bacteria replacing the normal vaginal flora, leading to an increase in PH. Microbiology will often report "clue cells seen". Treatment is with metronidazole.

9.3. Sexually transmitted infections

9.3.1. Infections include chlamydia, gonorrhoea and trichomoniasis. These are transmitted sexually, so the patient's history may guide diagnosis.

9.4. Mechanical irritation - e.g., long-distance cyclists, sexual abuse in girls. This category includes foreign bodies such as retained tampons (which can cause toxic shock syndrome) or condoms, cervical ectopy, polyps and genital tract malignancy.

9.5. Atrophic vaginitis or hypo-oestrogenism.

9.6. Helminthic infection (particularly threadworm/pinworm in young girls).

9.7. Contact dermatitis

9.8. Allergy to lubricants or spermicides can also present with vaginal discharge. (also enquire about new hygiene products.

9.9. Rectovesical fistula

9.9.1. Rectovaginal fistulas are a rarer cause of vaginal discharge and would require urgent discussion with the surgical team.

9.10. Urinary tract infection

10. INVESTIGATIONS

10.1. Microscopy and culture are not routinely carried out on women with features of typical acute uncomplicated vaginal candidiasis.

10.2. Role of culture — Culturing all patients is not required because culture is not necessary for diagnosis if microscopy confidently shows yeast in women with uncomplicated Candida vaginitis If vaginal culture is needed, patient should be referred to Family Physician/Specialist gynecologist and it is obtained in:

10.2.1. Women with clinical features of vaginal candidiasis, normal vaginal pH, and no pathogens (yeast, clue cells, trichomonads) visible on microscopy

10.2.2. A positive culture in these patients confirms the diagnosis and reveals the species of Candida, thus avoiding empiric, unindicated, or incorrect therapy.

10.2.3. Women with persistent or recurrent symptoms because many of these women have nonalbicans infections and/or infections that are resistant to azoles.

10.2.4. In patients with recurrent candidiasis – appropriate tests to rule out systemic association like diabetes etc

11. MANAGEMENT

11.1. Refer to APPENDIX 1 for Virtual Management of Vaginal Candidiasis Algorithm

11.2. General advice

11.2.1. Avoid using soap to clean the vulval area (advise the patient not to use internally and not to use more than once daily)

11.2.2. Use an emollient to moisturize the vulval skin

11.2.3. Wear loose-fitting underwear

11.2.4. Avoid applying topical irritants such as perfumed products

11.2.5. Good hygiene

11.3. Pharmacological treatment

11.4. Oral versus topical treatment

11.4.1. A variety of oral and topical preparations is available for the treatment of uncomplicated vaginal candidiasis

11.4.2. Topical treatments have fewer side effects (eg, possible local burning or irritation), while oral medication may cause gastrointestinal intolerance,

headache, rash, and transient liver function abnormalities. In addition, oral medications take a day or two longer than topical therapy to relieve symptoms.

11.4.3. The absence of superiority of any formulation, agent, or route of administration suggests that patient preference, and contraindications are the major considerations in the decision to prescribe an antifungal for oral or topical administration.

11.5. If topical therapy is chosen, vulvar treatment alone is not adequate to eradicate the vaginal reservoir of organisms, even in women whose main symptoms are vulvar. While vulvar treatment can improve vulvar symptoms, vaginal therapy is necessary to fully treat the disease.

12. TREATMENT

12.1. Uncomplicated disease can be managed via teleconsultation, whereas in complicated diseases patient should be referred for face to face consultation.

12.2. Oral

12.2.1. Fluconazole 150 mg orally in a single dose Uncomplicated infections usually respond to treatment within a couple of days. There is no medical contraindication to sexual intercourse during treatment, but it may be uncomfortable until inflammation improves. Treatment of sexual partners is not indicated.

12.3. Pessary

12.3.1. Miconazole 200 mg vaginal suppository, one suppository daily for 7 days

Clotrimazole - 500 mg stat or 100 mg x 6 nights

12.4. Topical

12.4.1. Clotrimazole 1% cream 5 g intravaginally daily for 7–14 days or Miconazole 2% cream 5 g intravaginally daily for 7 days

12.5. Severe/recurrent infection (recommend referral)

12.5.1. Recurrent vaginal and vulval candidiasis is defined as four or more episodes in one year with partial or complete resolution of symptoms in between episodes

12.5.2. Around 5% of women who develop one episode of vaginal and vulval candidiasis will develop recurrent disease

12.5.3. It is usually due to infection with C. albicans and various host factors including

a. Diabetes mellitus

b. Immunosuppression

c. Broad-spectrum antibiotic use

d. A possible link with allergy, particularly allergic rhinitis.

12.6. Treatment failure

12.6.1. Exclude poor compliance. Consider a short course of an oral antifungal if there has been poor compliance with intravaginal treatment

12.6.2. If symptoms are improving and compliance has been good, consider prescribing an extended course of either intravaginal or oral treatment

12.6.3. Topical treatments can cause vulvovaginal irritation so this should be considered

12.6.4. Look for an alternative diagnosis

12.6.5. Seek specialist advice

12.7. Rarely, male partners can suffer candidal balanitis. There is no evidence to support the treatment of asymptomatic male sexual partners in either episodic or recurrent vaginal and vulval candidiasis.

12.8. Treatment in pregnancy

12.8.1. Oral fluconazole and itraconazole are contra-indicated in pregnancy.

12.9. Immunocompromised patients

12.9.1. If immunocompromised, especially with HIV infection or diabetes, extend the treatment period to 7-14 days.

13. REFERRAL CRITERIA

13.1. <16 or >60 years old

13.2. Pregnant or breast-feeding

13.3. Severe infection

13.4. Symptoms differing from normal - eg, malodorous discharge, ulcers or blisters

13.5. Other associated systemic illness like diabetes, immunosuppressed, on chemotherapy

13.6. Symptoms not settling after using medication

13.7. Recurrent infection

13.8. Examination is essential if a cervical etiology, pelvic inflammatory disease (PID) or noninfective cause is suspected

13.9. The patient/partner has had a previous sexually transmitted infection

13.10. Abnormal menstrual bleeding or lower abdominal pain

13.11. Previous adverse reaction to antifungal treatments, or they have been ineffective

13.12. Non-albicans species infection

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APPENDIX 1 – VIRTUAL MANAGEMENT OF VAGINAL CANDIDIASIS ALGORITHM