DHA TELEHEALTH CLINICAL GUIDELINES

FOR VIRTUAL MANAGEMENT OF

DYSMENORRHEA – 26

Version 1

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Health Policies and Standards Department

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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 Dysmenorrhoea 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, if indicated during virtual telehealth assessment, to ER, family physicians or specialists for a face to face management.

Dysmenorrhea, painful menstruation, is one of the most common gynecologic disorders. It is the greatest single cause of lost work and school days among young women. Dysmenorrhea may be primary, with no associated organic pathology, or secondary, with demonstrable pathology

The primary purpose of this Telehealth Guideline is to prove the health physicians, who will be managing patients virtually, with a summary of the best available evidence for the virtual management of this very common condition among adults.

This guideline also identifies key “Red Flags” or serious symptoms associated with Dysmenorrhea which warrant a referral to ER or specialist for further face-to-face management

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
IUD	:	Intrauterine device
KPI	:	Key Performance Indicator
MRI	:	Magnetic Resonance Imaging
NSAIDs	:	Non-Steroidal Anti-Inflammatory Drugs
PID	:	Pelvic Inflammatory Disease
PV	:	Per Vagina

1. BACKGROUND

1.1. Pain associated with *menstruation* is called *dysmenorrhea*.

1.2. Dysmenorrhea is the most commonly reported menstrual disorder. More than one half of women who menstruate have some pain for 1–2 days each month.

1.3. Pathogenesis

There are two types of dysmenorrhea: primary dysmenorrhea and secondary dysmenorrhea.

1.3.1. Primary dysmenorrhea refers to the presence of recurrent, crampy, lower abdominal pain that occurs during menses in the absence of demonstrable disease that could account for these symptoms.

1.3.2. Secondary dysmenorrhea has the same clinical features but occurs in women with a disorder that could account for their symptoms, such as endometriosis, adenomyosis, or uterine fibroids.

1.4. In surveys, 50 to 90% of reproductive-aged women worldwide describe experiencing painful menstrual periods. The majority of these women are young and have primary dysmenorrhea. The prevalence of primary dysmenorrhea decreases with advancing age.

1.5. Risk Factors

The majority of women with primary dysmenorrhea do not have any risk factors for the disorder. In a systematic review that evaluated risk factors for dysmenorrhea,

multiple demographic, environmental, gynecological, and psychological factors appeared to be associated with the disorder, including

1.5.1. Age <30 years

1.5.2. Body mass index <20 kg/m^2

1.5.3. Smoking

1.5.4. Menarche before age 12

1.5.5. Longer menstrual cycles/duration of bleeding

1.5.6. Irregular or heavy menstrual flow

1.5.7. Premenstrual symptoms

1.5.8. Pelvic inflammatory disease

1.5.9. Mood disorders

1.5.10. Tubal ligation

1.5.11. History of sexual assault

1.5.12. Younger age at first childbirth and higher parity were associated with a reduced risk.

1.5.13. There appears to be a (small) familial predisposition to primary dysmenorrhea

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 Dysmenorrhoea 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. RECOMMENDATION

5.1. Virtual Clinical Assessment

5.1.1. Clinical History

History of present illness should cover complete menstrual history, including age at onset of menses, duration and amount of flow, time between menses, variability of timing, and relation of menses to symptoms. Clinicians should also ask about:

a. Cramping in the lower abdomen

b. Pain in the lower abdomen and/or lower back

c. Pain radiating down the legs

d. Nausea, vomiting and/or diarrhea

e. Fainting

f. Headaches

g. Dizziness

h. Disorientation

i. Hypersensitivity to sound and light

j. Fatigue

k. The age at which symptoms began

l. Their nature and severity

m. Factors that relieve or worsen symptoms (including the effects of contraceptives)

n. Degree of disruption of daily life

o. Vaginal discharge

p. Presence of pelvic pain unrelated to menses

q. Response to paracetamol or nonsteroidal anti-inflammatory drugs (NSAIDs)

r. Abnormal vaginal bleeding

s. Pregnancy

5.1.2. Past medical history should identify known causes, including PID, endometriosis, uterine adenomyosis, or fibroids. In addition, other chronic conditions should also be asked

5.1.3. Method of contraception should be ascertained, specifically asking about IUD use.

5.1.4. Past surgical history should identify procedures that increase risk of dysmenorrhea, such as cervical conization and endometrial ablation.

5.1.5. Sexual history should include marital status, prior or current history of sexual activity, abuse or other traumatic events.

6. RED FLAGS

6.1. The following findings are of particular concern:

6.1.1. New, unusual or sudden-onset pain

6.1.2. Constant sever pain

6.1.3. Evidence of peritonitis:

a. Rigid abdomen

b. Abdominal pain

c. Abdominal distension

d. Not passing flatus

e. Low urine output

f. Fever

6.1.4. Abnormal bleeding or heavy menstrual bleeding

6.1.5. Fever, abnormal PV discharge.

6.1.6. Weight loss.

6.1.7. Family history of f ovarian tumors

6.1.8. History of infertility.

6.1.9. Irregular bleeding after the age of 45

6.1.10. Onset after the age of 25 years

6.1.11. Hemodynamically unstable patient

6.1.12. Severe Anemia

6.2. Exclusion of secondary dysmenorrhea/ other pelvic pathology

6.2.1. Evaluation should, in general, include a detailed history to look for signs and symptoms suggestive of pelvic pathologies, such as pelvic inflammatory disease, endometriosis, adenomyosis, or fibroids. Laboratory tests, or referral for imaging studies, and laparoscopy are not required to exclude these disorders, but should be considered, as indicated, if pelvic disease is strongly suspected and/or response to initial treatment with NSAIDs/hormonal contraception is inadequate.

6.2.2. The following findings suggest the presence of pelvic pathology, consistent with secondary dysmenorrhea:

a. Onset of dysmenorrhea after age 25. However, endometriosis may occur in adolescents and a congenital uterine outlet obstruction can cause dysmenorrhea shortly after menarche

b. Abnormal uterine bleeding (e.g., heavy menstrual bleeding, irregular/infrequent bleeding, or intermenstrual bleeding)
c. Non-midline pelvic pain
d. Absence of nausea, vomiting, diarrhea, back pain, dizziness, or headache during menstruation
e. Presence of dyspareunia
f. Progression in symptom severity

7. DIFFERENTIAL DIAGNOSIS

7.1. The diagnosis of Dysmenorrhoea is usually straight forward but must be differentiated from the following conditions:

7.1.1. Ectopic pregnancy

Patients usually present with vaginal bleeding and crampy pelvic pain approximately six to eight weeks after the last menstrual period although later presentation is possible, especially if the pregnancy is not in the fallopian tube. Incidence increase in those with a prior history of ectopic pregnancy, tubal surgery, and pelvic infection, along with those who use an intrauterine device for contraception. Rupture may initially bring temporary relief of pain; however, massive intraperitoneal hemorrhage may ensue with high maternal mortality soon after rupture.

7.1.2. Appendicitis

Initial periumbilical pain, which later localizes to the area of peritoneal irritation, usually the right lower quadrant, followed by fever, vomiting, and anorexia is the most common presentation.

7.1.3. Ovarian and fallopian tube torsio

Ovarian torsion refers to twisting of the adnexa upon its pedicle and typically presents with an acute onset of sharp, intermittent abdominal pain associated with nausea and vomiting. Formation of ovarian cysts may predispose to torsion, and therefore, torsion has a higher incidence in adolescents than prepubertal girls. This condition requires prompt surgical intervention to prevent necrosis and loss of the ovary. Although typically not life-threatening, ovarian torsion does present a significant risk to the viability of the ovary.

7.1.4. Pelvic inflammatory disease

Pelvic inflammatory disease (PID) is most commonly caused by *C. trachomatis* and *N. gonorrhoeae*, both of which have the highest prevalence in the adolescent population. PID is an infection of the upper genital tract in females and includes endometritis, salpingitis, tubo-ovarian abscess, and pelvic peritonitis. Lower abdominal pain is the cardinal presenting symptom in adolescents with PID, although the character of the pain may be quite subtle. The recent onset of pain that

worsens during coitus or with jarring movement may be the only presenting symptom of PID; the onset of pain during or shortly after menses is particularly suggestive. About half of patients with PID have fever. Additional nonspecific symptoms may include abnormal vaginal bleeding, dysmenorrhea, vaginal discharge, or gastrointestinal symptoms.

7.1.5. Ruptured ovarian cyst

An ovarian cyst that ruptures can cause sudden, severe, unilateral pelvic pain without fever or any gastrointestinal, urinary, or vaginal symptoms. The pain often begins during strenuous physical activity, such as exercise or sexual intercourse. Blood from the rupture site may seep into the ovary, which can cause pain from stretching of the ovarian cortex, or it may flow into the abdomen, which has an irritant effect on the peritoneum. Significant hemorrhage leading to shock is rare.

7.1.6. Nephrolithiasis

Kidney stones, an increasingly common cause of pelvic pain in adolescents, typically presents with intense, paroxysmal flank pain, which may radiate to the lower abdomen and groin regions. The pain is usually colicky and causes the patient to twist about because they are

unable to find a position of comfort. Nausea, vomiting, and urinary symptoms may accompany the pain.

7.1.7. Urinary tract infection

Symptomatic cystitis causes suprapubic pain and dysuria. Fever, urinary urgency, frequency, and hesitancy may also be present. Pyelonephritis frequently presents with fever, vomiting, flank, and upper back pain. Symptoms of cystitis may also be present. Rapid urine dipstick tests and/or microscopic urinalysis establish the diagnosis.

8. MANAGEMENT

8.1. Refer to APPENDIX 1 for the Virtual Management of Dysmenorrhoea Algorithm

8.2. General Advice

8.2.1. For some young people, making simple lifestyle changes can help to reduce the frequency and intensity of dysmenorrhea symptoms. These changes may include:

a. regular exercise

b. a well-balanced diet and decreases in sugar and caffeine

c. adequate sleep and rest

d. smoking avoidance

e. activities to lower stress levels.

8.1.2. For patients who are not helped by lifestyle changes, treatment for dysmenorrhea may include:

a. Heating pad across the abdomen

b. Hot bath or shower

c. Abdominal massage

d. Pharmacological treatment.

8.2. Pharmacological treatment

8.2.1. Nonsteroidal anti-inflammatory medications, such as:

a. Ibuprofen: initially 300–400mg 3– 4 times daily; increased if necessary to max. 2.4g daily; maintenance dose of 0.6–1.2g daily.

b. Naproxen 500mg initially, then 250mg every 6–8 hours as required; max. dose after first day 1.25g daily

c. Mefenamic acid 500 mg TID.

8.2.2. The above NSAID drugs target prostaglandins. They reduce the amount of prostaglandins made by the body and lessen their effects. These actions make menstrual cramps less severe.

8.2.3. NSAIDs work best if taken at the first sign of menstrual period or pain. Women with bleeding disorders, asthma, aspirin allergy, liver damage, stomach disorders, or ulcers should not take NSAIDs

8.3. Paracetamol 0.5–1g every 4–6 hours to a max. of 4g daily (if NSAID is contraindicated)

8.4. Hormonal medications: (Refer to face to face consultation).

8.5. Vitamin supplements:

8.5.1. Vitamin B1 (Thiamine 100 mg PO daily) or magnesium supplements may be helpful, but not enough research has been done to recommend them as effective treatments for dysmenorrhea.

8.6. Follow-up

8.6.1. Patients should be followed-up within a week after teleconsultation. If patients fail to respond to the above treatments, a referral to specialist should be considered for further management and/or diagnostic studies including laparoscopy.

9. REFERRAL CRITERIA

9.1. Referral Criteria To ER

9.1.1. New, unusual or sudden-onset pain

9.1.2. Constant sever pain

9.1.3. Evidence of peritonitis:

a. Rigid abdomen

b. Abdominal pain

c. Abdominal distension

d. Not passing flatus

e. Low urine output

f. Fever

9.1.4. Non-midline pelvic pain or suspected ectopic pregnancy

9.1.5. Significant abnormal bleeding or heavy menstrual bleeding

9.1.6. Fever, abnormal PV discharge.

9.1.7. Hemodynamically unstable patient

9.1.8. Severe Anemia

9.2. Referral to Specialist/Family Medicine

9.2.1. Pain not relieving with the standard management

9.2.2. If during consultation, the following findings suggest the presence of pelvic pathology, consistent with secondary dysmenorrhea:

a. Onset of dysmenorrhea after age 25. However, endometriosis may occur in adolescents and a congenital uterine outlet obstruction can cause dysmenorrhea shortly after menarche

b. Abnormal uterine bleeding (e.g., heavy menstrual bleeding, irregular/infrequent bleeding, or intermenstrual bleeding)

c. Presence of dyspareunia

d. Progression in symptom severity

9.2.3. Unusual pain.

9.2.4. Weight loss.

9.2.5. Family history of ovarian tumors.

9.2.6. History of infertility.

9.2.7. Irregular bleeding after the age of 45

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APPENDIX 1 – VIRTUAL MANAGEMENT OF DYSMENORRHOEA ALGORITHM