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DHA TELEHEALTH CLINICAL GUIDELINES

FOR VIRTUAL MANAGEMENT

OF IRRITABLE BOWEL SYNDROME - 34

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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 Irritable Bowel Syndrome 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.

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

CBT	:	Cognitive Behavioral Therapy
DHA	:	Dubai Health Authority
EBP	:	Evidence Based Practice
EMA	:	Endomysial Antibodies
ER	:	Emergency Room
ESR	:	Erythrocyte Sedimentation Rate
FBC	:	Full Blood Count
HRS	:	Health Regulation Sector
IBS	:	Irritable Bowel Syndrome
SSRI	:	Selective Serotonin Reuptake Inhibitors
TTG	:	Tissue Transglutaminase

1. BACKGROUND

1.1. Introduction

1.1.1. Irritable bowel syndrome (IBS) is a chronic, relapsing and often life-long disorder. It is characterized by the presence of abdominal pain or discomfort, which may be associated with defecation and/or accompanied by a change in bowel habit.

1.1.2. People with IBS present with varying symptom profiles, most commonly 'diarrhea predominant', 'constipation predominant' or alternating symptom profiles. IBS most often affects people between the ages of 20 and 30 years and is twice as common in women as in men. But recent trend shows a significant prevalence of IBS in older people. IBS diagnosis should be a consideration when an older person presents with unexplained abdominal symptoms.

1.2. Pathogenesis

1.2.1. The actual cause is unknown; however, these factors have been shown to play a role:

- a. Muscle contractions in the intestine that are unusually strong
- b. Abnormalities in the nervous system of the intestines
- c. Inflammation of the intestines

- d. Severe infections such as gastroenteritis and bacterial colonization of the intestines
- e. Changes in gut microflora.

1.2.2. Apart from these, some triggers like certain foods and drinks etc. are also known to cause a flare up. These triggers include

- a. Alcohol
- b. Caffeine
- c. Spicy/Fatty food
- d. Stress/Anxiety

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 Irritable Bowel Syndrome (IBS) 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. CLINICAL SYMPTOMS

Irritable bowel syndrome (IBS) is characterized by chronic abdominal pain and altered bowel habits.

5.1. Chronic abdominal pain

5.1.1. Abdominal pain in IBS is usually described as a cramping sensation with variable intensity and periodic exacerbations. The location and character of the pain can vary widely. This distinguishes IBS from

Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. Entirely Liquid

cancer-related pain, which typically has a fixed site.

5.1.2. The severity of the pain may range from mild to severe. The pain is frequently related to defecation. While in some patients abdominal pain is relieved with defecation, some patients report worsening of pain with defecation. Emotional stress and meals may exacerbate the pain. Patients with IBS also frequently report abdominal bloating and increased gas production in the form of flatulence or belching.

5.2. Altered Bowel Habits

Symptoms of IBS include diarrhea, constipation, alternating diarrhea and constipation, or normal bowel habits alternating with either diarrhea and/or constipation. When establishing bowel habit, using Bristol Stool Form Scale can help patients with description, particularly when determining quality and quantity of stool.

5.2.1. Diarrhea

Diarrhea is usually characterized as frequent loose stools of small to moderate volume. Bowel movements generally occur during waking hours, most often in the morning or after meals. Most bowel movements are preceded by lower abdominal cramping pain, urgency, and a sensation of incomplete evacuation or tenesmus. Approximately one-half of all patients with IBS complain of mucus discharge with stools. Large volume diarrhea, bloody stools, nocturnal diarrhea, and greasy stools are not associated with IBS.

5.2.2. Constipation

Stools are often hard and may be described as pellet-shaped. Patients may also experience tenesmus even when the rectum is empty. Associated symptoms include:

- a. Bloating

- b. Flatulence
- c. Incomplete evacuation
- d. Rectal hypersensitivity
- e. Urgency
- f. Passage of mucus
- g. Back pain
- h. Urinary bladder symptoms.

General history:

- a. Appetite, weight loss, laxative abuse.
- b. Past medical history
- c. Any known condition like endocrine disorder such as diabetes mellitus or thyroid disorder, psychiatric illness
- d. Past surgical history
- e. Possibility of adhesions and obstruction

6. DIAGNOSIS

6.1. IBS should be suspected in patients with chronic abdominal pain and altered bowel habits.

6.1.1. Diagnostic criteria

Rome IV criteria is the most widely used to standardize the diagnosis of IBS

6.1.2. Rome IV criteria for IBS

IBS is defined as recurrent abdominal pain, on average, at least 1 day per week in the last 3 months, associated with two or more of the following criteria

- a. Related to defecation
- b. Associated with a change in stool frequency
- c. Associated with a change in stool form (appearance)

7. DIFFERENTIAL DIAGNOSIS

Common conditions which may be mistaken for IBS include:

- 7.1. Inflammatory bowel disease as in Crohn's disease (ulcerative colitis)
- 7.2. Symptoms which suggest obstruction of the intestine, called intestinal pseudo-obstruction, as in diabetes or scleroderma
- 7.3. Abuse of medications such as laxatives or bowel binders
- 7.4. Lactose intolerance
- 7.5. Psychiatric disorders (such as depression, anxiety or somatization disorder)
- 7.6. Infections of the digestive tract
- 7.7. Malabsorption syndromes (such as celiac disease or pancreatic insufficiency)
- 7.8. Endocrine disorders (such as hypothyroidism, hyperthyroidism, diabetes or Addison's disease)
- 7.9. Certain rare endocrine tumors (such as gastrinomas or carcinoid tumors)

7.10. Carcinomas of the intestine

8. RED FLAGS

8.1. Age of onset after age 50 years

8.2. Progressive abdominal pain

8.3. Bleeding per rectum or bloody diarrhea

8.4. Unexplained weight loss

8.5. Fever

8.6. Shortness of breath, palpitations (Anemia)

8.7. Severe constipation

8.8. Persistent diarrhea

8.9. Family history of G.I. malignancy, Inflammatory bowel disease, colorectal cancer

8.10. Laboratory abnormalities (iron deficiency anemia, elevated C-reactive protein or fecal calprotectin/lactoferrin)

9. INVESTIGATIONS

9.1. There is no definitive diagnostic laboratory test for IBS. The purpose of laboratory testing is primarily to exclude an alternative diagnosis.

9.2. In people who meet the IBS diagnostic criteria, the following tests should be undertaken to exclude other diagnoses:

9.2.1. Full blood count (FBC)

9.2.2. Erythrocyte sedimentation rate (ESR) or plasma viscosity

- 9.2.3. C-reactive protein (CRP)
- 9.2.4. Antibody testing for coeliac disease (endomysial antibodies [EMA] or tissue transglutaminase [TTG])
- 9.2.5. Age-appropriate colorectal cancer screening in all patients
- 9.3. In patients with diarrhea:
 - 9.3.1. Fecal calprotectin or fecal lactoferrin
 - 9.3.2. Stool testing for giardia (antigen detection or nucleic acid amplification assay)
 - 9.3.3. Serologic testing for celiac disease
 - 9.3.4. C-reactive protein levels, only if fecal calprotectin and fecal lactoferrin cannot be performed
- 9.4. The following tests are not necessary to confirm diagnosis in people who meet the IBS diagnostic criteria:
 - 9.4.1. Ultrasound
 - 9.4.2. Rigid/flexible sigmoidoscopy
 - 9.4.3. Colonoscopy; barium enema
 - 9.4.4. Thyroid function test
 - 9.4.5. Fecal ova and parasite test
 - 9.4.6. Fecal occult blood
 - 9.4.7. Hydrogen breath test (for lactose intolerance and bacterial overgrowth).

10. MANAGEMENT

10.1. Refer to APPENDIX 1 for the Virtual Management of Irritable Bowel Syndrome Algorithm

10.2. Dietary and lifestyle advice:

People with IBS should be given information that explains the importance of self-help in effectively managing their IBS. This should include information on general lifestyle, physical activity, diet and symptom-targeted medication.

10.2.1. Diet and nutrition:

Should be assessed for people with IBS and the following general advice given.

- a. Have regular meals and take time to eat.
- b. Avoid missing meals or leaving long gaps between eating.
- c. Drink at least 8 cups of fluid per day, especially water or other non-caffeinated drinks, for example herbal teas.
- d. Restrict tea and coffee to 3 cups per day.
- e. Reduce intake of alcohol and fizzy drinks.
- f. It may be helpful to limit intake of high-fiber food (such as whole meal or high-fiber flour and breads, cereals high in bran, and whole grains such as brown rice).

- g. Given the absence of serious side effects and potential benefit, psyllium should be considered in patients with IBS whose predominant symptom is constipation. As some patients may experience increased bloating and gas, a starting dose of psyllium of one-half to one tablespoon daily is suggested. The dose should then be slowly titrated up based on response to treatment.
- h. Reduce intake of 'resistant starch' (starch that resists digestion in the small intestine and reaches the colon intact), which is often found in processed or re-cooked foods.
- i. Limit fresh fruit to 3 portions per day (a portion should be approximately 80 g).
- j. People with diarrhea should avoid sorbitol, an artificial sweetener found in sugar-free sweets (including chewing gum) and drinks, and in some diabetic and slimming products.
- k. People with wind and bloating may find it helpful to eat oats (such as oat-based breakfast cereal or porridge) and linseeds (up to 1 tablespoon per day).
- l. People with IBS who choose to try probiotics should be advised to take the product for at least 4 weeks while monitoring the effect.

- m. Healthcare professionals should discourage the use of Aloe Vera in the treatment of IBS.

10.2.2. Lifestyle modification:

- a. Physical activity: Healthcare professionals should assess the physical activity levels of people with IBS. People with low activity levels should be given brief advice and counselling to encourage them to increase their activity levels.
- b. Stress management: Encourage the patient to identify and make the most of their available leisure time and to create relaxation time.
- c. Adequate sleep: Encourage them to have adequate sleep.

10.2.3. Pharmacological treatment

Decisions about pharmacological management should be based on the nature and severity of symptoms.

The recommendations made below assume that the choice of single or combination medication is determined by the predominant symptom(s).

- a. Antidiarrheal drugs: To relieve diarrhea. These include

Loperamide

For acute diarrhea - 4mg initially followed by 2mg after each loose stool for up to 5 days; usual dose 6–8mg daily; maximum - 16mg daily

For chronic diarrhoea in adults, initially, 4–8 mg daily in divided doses, subsequently adjusted according to response and given in 2 divided doses for maintenance; maximum – 16 mg

b. Laxatives – To relieve complaints of constipation

Bisacodyl – 5 to 15 mg as enteric coated tabs 1 time per day or 10 mg suppository per rectum 1 time per day

c. Antispasmodics: To relieve spasms. E.g. Hyoscine butylbromide

Dosage - 20mg 4 times daily

Irritable bowel syndrome - 10mg 3 times daily, increased if required up to 20mg 4 times daily

d. Tricyclic antidepressants and Selective serotonin reuptake inhibitors

(SSRIs): To relieve depression and severe pain. If needed, then the patient should be referred to Family Physician/Specialist for face to face consultation

10.2.4. Psychological interventions:

Referral for psychological interventions (cognitive behavioral therapy [CBT], hypnotherapy and/or psychological therapy) should be considered for people with IBS who do not respond to pharmacological treatments after 12 months and who develop a continuing symptom profile (described as refractory IBS).

11. REFERRAL CRITERIA

11.1. Routine referral to Family Physician

- 11.1.1. Patient is not responding to medications
- 11.1.2. Severe constipation
- 11.1.3. Persistent diarrhea
- 11.1.4. Recurrent fever
- 11.1.5. Abdominal mass
- 11.1.6. Age of onset after age 50 years
- 11.1.7. Persistent or frequent abdominal distension especially in a woman
- 11.1.8. Unexplained weight loss
- 11.1.9. Family history of G.I. malignancy, Inflammatory bowel disease, colorectal cancer
- 11.1.10. Laboratory abnormalities (iron deficiency anemia, elevated C-reactive protein or fecal calprotectin/lactoferrin)

11.2. Referral to Emergency Department:

- 11.2.1. Severe rectal bleeding
- 11.2.2. Shortness of breath, palpitations
- 11.2.3. Persistent vomiting or diarrhea

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APPENDIX 1 – VIRTUAL MANAGEMENT OF IRRITABLE BOWEL SYNDROME ALGORITHM

