• Electronic copy is controlled under document control procedure. Hard copy is uncontrolled & under responsibility of beholder. • It is allowed ONLY to access and keep this document with who issued, who is responsible and to whom it is applicable. • Information security code: ☑ Open ☐ Shared -Confidential ☐ Shared-Sensitive ☐ Shared-Secret	• النسخة الإلكترونية هي النسخة المضبوطة وفق إجراء ضبط الوثائق. النسخ الورقية غير مضبوطة وتقع على مسؤولية حاملها. • يسمح بالوصول وبالاحتفاظ بهذه الوثيقة مع مصدرها أو مع المسؤول عن تطبيقها أو مع المطبق عليهم. • تصنيف امن المعلومات: ☑ بيانات مفتوحة ☐ مشارك –خاص ☐ مشارك –حساس ☐مشارك –سري

DHA TELEHEALTH CLINICAL GUIDELINES

FOR VIRTUAL MANAGEMENT

OF CONSTIPATION - 04

Issue date: 27/07/2021

Effective date: 27/07/2021

Health Policies and Standards Department

Health Regulation Sector (2021)

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 Constipation 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

TABLE OF CONTENTS

EXECUTIVE SUMMARY	**4**
DEFINITIONS/ABBREVIATIONS	**5**
1. BACKGROUND	**6**
2. SCOPE	**7**
3. PURPOSE	**7**
4. APPLICABILITY	**8**
5. RECOMMENDATION	**8**
6. RED FLAGS	**9**
7. INVESTIGATIONS	**10**
8. MANAGEMENT	**10**
9. REFERRAL CRITERIA	**12**
REFERENCES	**14**
APPENDIX 1 – VIRTUAL MANAGEMENT OF CONSTIPATION ALGORITHM	**15**

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.

Constipation represents a subjective interpretation of real or imagined disturbance of bowel function. Although constipation can have many causes, it is most often functional or idiopathic. The term constipation is variably defined by patients and physicians. A patient's perception of constipation may include not only the objective observation of infrequent bowel movements but also the subjective complaints of straining at stooling, incomplete evacuation, abdominal bloating or pain, hard or small stools, or a need for digital manipulation to enable defecation.

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
GI	:	Gastrointestinal
PEG	:	Polyethylene Glycol

1. BACKGROUND

1.1. According to the Rome IV criteria, functional constipation is defined as any two or more of the following features:

1.1.1. Straining during more than 25% of defecations

1.1.2. Lumpy or hard stools in more than 25% of defecation

1.1.3. Sensation of incomplete evacuation for more than 25% of defecations

1.1.4. Sensation of anorectal obstruction/blockage for more than 25% of defecations

1.1.5. Manual maneuvers to facilitate more than 25% of defecations (e.g., digital evacuation, support of the pelvic floor) Fewer than three spontaneous bowel movements per week.

1.2. The above criteria must be fulfilled for the last three months with symptom onset six months prior to diagnosis, loose stools should rarely be present without the use of laxatives, and there must be insufficient criteria for a diagnosis of irritable bowel syndrome.

1.3. Causes:

1.3.1. Functional causes: dietary factors (low residue), motility disturbance (slow transit time, outlet delay, irritable bowel syndrome), sedentary lifestyle

1.3.2. Structural abnormalities: anorectal disorders (anal or perianal fissures, thrombosed hemorrhoids), colonic strictures (diverticulosis, ischemia,

radiation therapy), colonic mass lesions with obstruction (adenocarcinoma), idiopathic megarectum

1.3.3. Endocrine and metabolic conditions: diabetes mellitus, hypercalcemia, hyperparathyroidism, hypokalemia, hypothyroidism, pregnancy, uremia

1.3.4. Neurogenic conditions: cerebrovascular events, multiple sclerosis, Parkinson's disease, Hirschsprung's disease, spinal cord tumors

1.3.5. Smooth muscle and connective tissue disorders: amyloidosis, scleroderma

1.3.6. Psychogenic conditions: anxiety, depression, somatization

1.3.7. Drugs: antacids, anticholinergics, antidepressants, calcium channel blockers, cholestyramine (Questran), clonidine (Catapres), diuretics, levodopa (e.g., with carbidopa [Sinemet]), narcotics, nonsteroidal anti-inflammatory drugs, psychotropics, sympathomimetics

1.3.8. Opioid induced constipation is common in those suffering from chronic or cancer-related pain.

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 Constipation 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. In telemedicine consultation, physician should aim to:

5.1.1. Firstly, establish that the patient has constipation

5.1.2. Secondly, exclude systemic disease or a structural disorder of the intestines

5.1.3. Thirdly, decide whether referral or further investigations are required, and how urgently.

5.2. It is important to elicit a thorough history of constipation:

5.2.1. An important part of the history includes defining the nature, onset and duration of constipation. Determining if the patient's concerns arise from misconceptions regarding normal bowel habits may be aided by obtaining a two-week bowel diary.

5.2.2. The history should also focus upon identifying secondary causes of constipation. Most patients with idiopathic constipation are otherwise asymptomatic.

5.2.3. A careful drug history is important, particularly the temporal relationship between starting a particular drug and the onset of constipation.

5.2.4. Many systemic or neurologic disorders that impair colonic motility affect organs outside of the gastrointestinal tract thus, patients with these disorders may have other symptoms in addition to constipation.

5.2.5. Local processes (e.g., tumors) often produce other symptoms such as abdominal pain or rectal bleeding.

5.3. A recent and persistent change in bowel habits, if not associated with a readily definable cause of constipation (e.g., medications), should prompt an evaluation to exclude structural bowel changes or organic diseases. This is particularly important in older adults who complain of excessive straining or a sense of incomplete evacuation, or who also exhibit anemia or occult gastrointestinal bleeding. A diagnosis of functional constipation should be considered only after these other diseases have been excluded

6. RED FLAGS

6.1. New onset in elderly patient

6.2. Unexplained anaemia

6.3. Rectal bleeding

6.4. Hematochezia

6.5. Positive faecal occult blood test

6.6. Family history of bowel cancer or inflammatory bowel disease

6.7. Tenesmus

6.8. Weight loss

6.9. Severe persistent constipation that is unresponsive to treatment

7. INVESTIGATIONS

7.1. Laboratory studies and colorectal imaging are appropriate when constipation is persistent and fails to respond to conservative treatment, or when a disorder is suspected.

7.1.1. Complete blood count

7.1.2. Thyroid function tests

7.1.3. Calcium, glucose, potassium, and creatinine levels

7.1.4. The stool should be tested for occult blood

7.2. If investigations like Endoscopy (Flexible sigmoidoscopy and colonoscopy), Radiography, Colon transit studies and any further investigations are required, then the patient will need to be referred to Family Physician or the specialist.

8. MANAGEMENT

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

8.2. The initial management of constipation includes patient education and dietary changes. Bulk laxatives are recommended in patients who do not respond to lifestyle and dietary modification

8.3. Lifestyle modification

8.3.1. General measures such as increased fluid intake and exercise are suggested to treat constipation

8.3.2. It is advisable to encourage patients to establish a regular pattern of bowel movement. (Most patients who have normal bowel pattern usually empty stools at approximately the same time every day).

8.3.3. Diet and fiber — Fiber increases stool bulk, which causes colonic distention and promotes stool propulsion. A daily fiber intake of 20 to 25 g/day is generally recommended. The effects of fiber on bowel movements may take several weeks.

8.4. Laxatives

8.4.1. Laxative usage in the older adults should be individualized keeping in mind the patient's history (cardiac and renal comorbidities), drug interactions, cost, and side effects

8.4.2. Bulk forming laxatives include: Methylcellulose (eg, Citrucel) - Up to 1 tablespoon (2 grams fiber) or 4 caplets (500 mg fiber per caplet) 3 times per day

8.4.3. Osmotic laxatives — A trial of osmotic laxatives should be considered in patients not responding to bulking agents.

a. Low-dose polyethylene glycol (PEG) (17 g/day) has been demonstrated to be efficacious and well tolerated in older patients. However, high-dose PEG (34 g/day) is associated with abdominal bloating, cramping, and flatulence, and older adults may be more susceptible to these side effects

b. Lactulose increases stool frequency, decreases the severity of constipation symptoms, and reduces the need for other laxatives in older adult patients - 10 to 20 grams (15 to 30 mL) every other day. May increase up to 2 times per day.

8.4.4. Suppositories, and enemas include:

a. Glycerin - One suppository (2 or 3 grams) per rectum 1 time per day

b. Enemas (tap water, soapsuds) should be used only as needed for constipation in the older adult, ie, after several days of constipation in order to prevent fecal impaction. Adverse effects include rectal mucosal damage with soapsuds enemas.

9. REFERRAL CRITERIA

9.1. Referral to ER

9.1.1. Associated with massive rectal bleeding

9.2. Referral Criteria to Family Physician/ Specialist

9.2.1. Hematochezia

9.2.2. Positive fecal occult blood test

9.2.3. Severe persistent constipation that is unresponsive to treatment

9.2.4. Weight loss ≥10 pounds

9.2.5. Family history of colon cancer or inflammatory bowel disease

9.2.6. New onset in elderly

9.2.7. Unexplained anemia

REFERENCES

1. Arce, D.A., Ermocilla, C.A. and Hildegardo Costa (2013). Evaluation of Constipation. *American Family Physician*, [online] 65(11), p.2283. Available at: https://www.aafp.org/afp/2002/0601/p2283.html [Accessed 17 Oct. 2019].
2. Dr Lizzie Croton (2009). *Red Flag Symptoms: Constipation*. [online] Gponline.com. Available at: https://www.gponline.com/red-flag-symptoms-constipation/gi-tract/article/880832 [Accessed 17 Oct. 2019].
3. Wald, A. (2019). *Management of chronic constipation in adults*. [online] Uptodate.com. Available at: https://www.uptodate.com/contents/management-of-chronic-constipation-in-adults?search=constipation&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1 [Accessed 17 Oct. 2019].

APPENDIX 1 – VIRTUAL MANAGEMENT OF CONSTIPATION ALGORITHM