MODULE 3 – SYMPTOM MANAGEMENT: GASTROINTESTINAL DISTRESS

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Symptom Management: GI Distress

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GI Symptom Management: Patient & Family Education

Abdominal Pain, Diarrhea, and Constipation

Gut Health Symptom Diary

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GI Symptom Management: Webinars

- Abdominal Pain and Altered Bowel Habits: Management of Lower Gastrointestinal Symptoms in Cystic Fibrosis
  --Christopher D. Vélez, MD
- Heartburn, Reflux, Nausea, and Vomiting: Management of Upper Gastrointestinal Symptoms in Cystic Fibrosis
  --Christopher D. Vélez, MD

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GI Symptom Management: Best Practice Guides

Best Practice Guide: Management of Constipation and Diarrhea

Best Practice Guide: Management of Nausea and Vomiting

Best Practice Guide: Management of Heartburn and Reflux

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GI Symptom Management: Objectives

- Review selected topics as presented in two of the three GI Best Practice Guides
  - ***Constipation & diarrhea***
  - ***Heartburn & reflux***
  - *Nausea & vomiting*
- Illustrate their practical application with case descriptions from two of three GI Best Practice Guides
  - ***Lower GI pediatric case***: Constipation & diarrhea
  - ***Upper GI adult case***: GERD
  - CF programs can use ***one or both cases*** as appropriate to their needs

GI Symptom Management: Key Content in the Best Practice Guides

- The three GI ***Best Practice Guides*** cover key content areas for primary palliative care of people with CF
  - Constipation & diarrhea
  - Heartburn & reflux
  - Nausea & vomiting
- Each guide covers three topics
  - Symptoms to consider
  - Diagnostic testing
  - Management

GI Symptom Management: Key Content in All Best Practice Guides

- Physical symptom management is one component of palliative care
  - Goal to reduce distress, improve quality of life
- Management section of GI Best Practice Guides includes range of primary palliative care interventions to consider in co-developing a comprehensive treatment plan
  - Lifestyle modification
  - Psychosocial interventions
  - Integrative interventions
  - Medical management
  - Endoscopic/surgical interventions
  - When to refer to a specialist

GI Symptom Management: Assessment

- Principles introduced in the Pain Best Practice Guide apply to GI symptom management as well
- Competent treatment planning requires a competent assessment, guided by its ***objectives: The 3 "C's"***
  - ***Character***: ***Characterize the symptom*** to guide work-up and selection of therapies
  - ***Cause***: ***Identify the etiology***, if possible, to clarify the potential for disease-modifying therapy
  - ***Context***: ***Understand the impact and context*** to integrate symptom management into the broader palliative plan of care

Multidimensional Symptom Description

- ***"P-Q-R-S-T"***
  - ***"P"*** = Provocative and palliative factors
  - ***"Q"*** = Quality of the symptom
  - ***"R"*** = Region → Localized (where?), multifocal, or generalized
  - ***"S"*** = Severity → Verbal rating scale or a numeric scale "on average during the past week" and "at its worst during the past week"
  - ***"T"*** = Temporal features → Onset, course, and fluctuation

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GI Symptom Management: Objectives

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Constipation & Diarrhea: Symptoms to Consider

- **Rule of 3s:** Normal bowel movement frequency is 3 times/day to 3 times/week
- **Be precise and ask for clarification** when gathering history
  - ***"When you say you are constipated…"***
    - Hard stool? Excessive straining?
    - Sense of incomplete evacuation?
    - Need to use fingers to remove/ promote stool passage?
    - Infrequent bowel movements?
    - Bloating with normal bowel movement frequency?
    - Constipation with abdominal pain?
  - ***"When you say you have diarrhea…"***
    - Liquid stool? Frequent movements?
    - Incontinence/accidents? Diarrhea in the setting of constipation?
    - Alternating diarrhea with constipation? Diarrhea with abdominal pain?

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Constipation & Diarrhea: Symptoms to Consider

- Two main distinctions in testing and management
  - **Acuity**
    - Acute
    - Chronic
  - **Alarm signs:** Signs and symptoms requiring immediate attention
    - Present
    - Absent

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Constipation & Diarrhea: Symptoms to Consider

- **Acute constipation/diarrhea**
  - Emergent CF-related etiologies such as distal intestinal obstruction syndrome, antibiotic-associated diarrhea
  - Non-CF causes like *C. difficile*-associated diarrhea, irritable bowel syndrome
- **Chronic constipation/diarrhea**
  - Benign CF-related etiologies such as pancreatic exocrine insufficiency
  - Non-CF causes such as inflammatory bowel disease
  - "CF-triad" of dysmotility, dysbiosis, and inflammation

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Constipation & Diarrhea: Symptoms to Consider

- **Alarm signs require prompt examination** for organic, structural, or malabsorptive causes (insufficiency, malignancy)
  - Bleeding
  - Abdominal pain
  - Unexpected weight loss in adults
  - Failure to appropriately gain weight in children
- **Anxiety** can increase severity or frequency
  - Functional bowel disorders like irritable bowel syndrome
  - History of sexual abuse/trauma

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Focused Differential Diagnosis of Constipation & Diarrhea in CF

CF-related causes of constipation	• Slow-transit constipation • Distal intestinal obstruction syndrome (DIOS) • Small intestinal bacterial overgrowth
CF-related causes of diarrhea	• Pancreatic exocrine insufficiency • Small intestinal bacterial overgrowth
Non-CF causes of altered bowel habits	• Infectious enteritis • C. difficile-associated diarrhea • Antibiotic-associated diarrhea • Irritable bowel syndrome • Pelvic dyssynergia • Endocrinopathy (e.g., thyroid disturbance) • Medication-related

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Constipation & Diarrhea: Testing to Consider Before GI Referral

Diagnostic modality	When to consider
Initial evaluation by CF team	
Stool-based testing	• Chronic diarrhea • Limited utility in acute diarrhea; consider in context (e.g., acute bloody diarrhea with concern for food poisoning) • Stool ova and parasites for Giardia; Stool osmolality • Calprotectin for inflammation; C. difficile stool testing • Qualitative/quantitative fat (pancreatic exocrine insufficiency)
Blood-based testing	When systemic process is suspected: Sed rate, CRP, CBC, TSH
CT	• Acute presentation, abdominal tenderness concerning for bowel obstruction, mesenteric ischemia, appendicitis • Chronic symptoms, for structural disease
Subsequent evaluation by CF team	
MRI	• If structural etiologies suspected (include enterography)
Abdominal x-ray	• Acute presentation, to exclude DIOS, bowel obstruction • Chronic symptoms, paired with a Sitz marker, for chronic constipation
Upper GI series (w/small bowel follow-through)	• Generally not for acute symptoms • If chronic, can evaluate for structural alterations in parts of small intestine not examined by endoscopy

Constipation & Diarrhea: Testing to Consider in Collaboration with GI

Diagnostic modality	When to consider
Endoscopy	• Any change in bowel function • For diarrhea: To exclude inflammatory bowel disease, microscopic colitis • For constipation: To exclude narrowing of colon, particularly if history of meconium ileus • Upper endoscopy, if small bowel source suspected
Breath testing	• When small intestinal bacterial growth suspected • May empirically treat instead of testing ○ Rifaximin 550 mg every 8 hours for 14 days

Anorectal manometry	• When pelvic dyssynergia is suspected
	  ○ Use of fingers to manually remove stool
	  ○ Sense of incomplete evacuation
	• Fecal incontinence
	• Helps show who may benefit from biofeedback therapy

Constipation & Diarrhea: Management Approaches

Approach	Type	Examples

Non-Medical Management	Lifestyle modification	• Plenty of exercise
		• Stay well-hydrated
		• Fiber intake
		• If bloating predominant, FODMAP diet
		  ○ Work with nutritionist
		  ○ If no improvement after elimination for 4 weeks, resume normal diet

	Psychosocial interventions	• Cognitive behavioral approaches
		  ○ Psychiatric comorbidity
		  ○ Symptom-specific anxiety

	Integrative interventions	• Acupuncture • Yoga • Ginger • Peppermint oil

Constipation & Diarrhea: Management Approaches

Approach	Type	Examples
Medical Management	Osmotic laxative	• MiraLAX® ○ Often first-line
	Stimulant laxative	• Sennosides • Bisacodyl ○ Both may cause abdominal discomfort

	Rescue therapy	• Magnesium citrate
		  ○ Electrolyte disturbance risk
		  ○ Avoid if renal insufficiency

Consider baseline or as-needed bowel regimen before referral to GI specialist

Constipation & Diarrhea: Management Approaches

Approach	Type	Examples

Medical Management by GI Specialist	Laxative-refractory constipation management	• **Pro-secretory therapy**
		  ○ Linaclotide, lubiprostone, plecanatide
		• **Pro-kinetic therapy**
		  ○ Prucalopride

	Routine diarrhea management	• Loperamide as needed • Empiric bile acid sequestrant ○ Cholestyramine, cholestipol

	More troublesome symptoms	• **Diarrhea**
		  ○ Alosetron, eluxadoline (black box warnings)
		  ○ If abdominal pain persists, consider nortriptyline
		• **Constipation**
		  ○ If abdominal pain despite improved bowel habit, consider duloxetine

Pediatric Case Discussion: GI Symptom Management in a Model of Palliative Care for CF

- 7-year-old girl with pancreatic insufficient CF, homozygous F508del
- BMI 20th percentile 2 years ago, 15% last year, 8% this year
- Brought to CF clinic by both parents
- Annual palliative care needs assessment

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Integrated Palliative Care Outcome Scale (IPOS): GI Items for Ages ≥12 Years

How have the following symptoms affected you over the past week?	Not at all	Slightly	Moderately	Severely	Over-whelmingly
Nausea (feeling like you are going to be sick)	0	1	2	3	4
Vomiting (being sick)	0	1	2	3	4
Constipation	0	1	2	3	4
Poor appetite	0	1	2	3	4

Additional GI symptoms may be elicited by these IPOS items:

- *What have been your main problems or concerns over the past week?*
- *Please list any other symptoms not mentioned above and tick one box to show how they have affected you over the past week*

Murtagh FE, et al. *Pall Med.* 2019 Sep;33(8):1045-57.

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ADAPT-CF Communication Guide for Children <12 Years: GI Items

- Assessing for Distressing Symptoms and Palliative Care Needs through Targeted Communication **(ADAPT-CF)**
- Use the ADAPT-CF, a pediatric communication guide for the IPOS
  - Ages 0-3: Direct symptom-specific questions to **parents**
  - Ages 4-6: Direct questions to **child**
  - Ages 7-11: Direct questions to **child**
- For children <12, CFF guidelines recommend annual assessment ***guided by*** the IPOS
  - Items are not developmentally appropriate for young children

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ADAPT-CF: Child Responses

7-year-old girl with pancreatic insufficient CF, declining BMI, at CF clinic with parents for annual needs assessment

How has your tummy been feeling?

- *It feels sick when I eat.*
- *I have to go to the bathroom a lot. I hate when I have to go at school.*

Are there times you don't want to eat when other people around you are eating, like at lunch or dinner?

- *Dinner is gross. I don't like what they make.*

Do you have any questions about your medicines or your treatment?

- *Why do I have to take them all the time?*

How will you respond to the child's comments and question?

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ADAPT-CF Family Conversation: Parent Concerns

What have been your family's main problems or concerns lately?

- Dad: "*She doesn't eat well. She looks skinny.*"
- Mom: "*She won't eat anything I cook. She just eats cereal. I don't know what to do.*"

What might be going on medically?
What might be going on in the family system? At school?
What else would you like to know?

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Brief Assessment Scale for Caregivers (BASC) Responses from Parents:

Rate your distress during this past month:	Not at all distressed	A little distressed	Some distress	A lot of distress	Does not apply
Distress at seeing your relative or friend in so much pain or discomfort	1	2	3	4	0
Distress at not having enough time to do your job, other responsibilities and chores	1	2	3	4	0
Distress at having strained relationships with other family members over taking care of your relative or friend	1	2	3	4	0

How might you interpret high vs. low scores?
Do you think each parent would rate these items similarly?

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Pediatric Case Discussion: GI Symptom Management

- 7-year-old girl with pancreatic insufficient CF, homozygous F508del
- Hard stools every 3-4 days
- Incontinence of liquid stool 1-2x/week
- Nausea & bloating after meals
- Low appetite, poor weight gain
  - Falling off former growth trajectory
- Parents feel probiotics are helping

What's the most likely explanation?
- **What are you most worried about?**

What are your next steps in diagnostic assessment?
- **How urgent is further evaluation?**

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Pediatric Case Discussion: Diagnostic Assessment

- Abdominal examination is not remarkable
- Abdominal X-ray full of stool
- LFTs are normal
- Vitamin D3 is low at 15

What does the diagnostic assessment indicate about the nature of the symptoms and next steps?

Pediatric Case Discussion: Constipation & Diarrhea

- Based on the characterization of symptoms and diagnostic assessment
- Symptoms are chronic and likely represent *CF-related constipation with secondary overflow diarrhea*
  - Intervention is indicated
    - Symptoms are distressing to both child and parents
    - Impact on appetite, weight gain, growth, nutrition
      - Concern for adequacy of pancreatic enzyme therapy
    - Impact on individual functioning at home and school
    - Impact on family functioning, especially at mealtimes

Pediatric Case Discussion: Chronic Constipation Management

The GI Best Practice Guides include a range of primary palliative care interventions to consider in co-developing a comprehensive treatment plan

What interventions might you suggest?

- Lifestyle modifications
- Psychosocial interventions
  - *If family is coping well?*
  - *If family is experiencing frequent criticism, conflict, overcontrol, oppositional behavior?*
- Integrative interventions
- Medical management or endoscopic/surgical interventions
- When to refer to a specialist

Consider simultaneous vs. sequential interventions.
Some may not be appropriate or acceptable to the patient/family.
Which CF team members might be helpful to engage?

Pediatric Case: Sample Interventions for Chronic Constipation

Intervention Type	Examples and Notes
Lifestyle modification	• Increase hydration • Work with CF team nutritionist around meal planning
Psychosocial intervention	Depending on family needs: • Supportive intervention, reinforcing strengths during assessment • Behavioral intervention around mealtime challenges • Parent child interaction therapy (PCIT) or family therapy
Integrative intervention	Ok to continue using probiotics
Medical management	• Start polyethylene glycol • Increase vitamin D3 • Optimize enzyme dose, storage, adherence ○ Age-appropriate education for child (what enzymes do, when to take them)
Refer to a specialist	Consult GI if signs & symptoms become refractory or urgent (e.g., acute pain, bleeding)

GI Symptom Management: Objectives

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Heartburn & Reflux: Symptoms to Consider

- **Classic symptoms of Gastroesophageal Reflux Disease (GERD)**
  - Heartburn (particularly ascending)
  - Regurgitation
  - Bitter taste
- **Atypical/extra-esophageal manifestations of GERD**
  - Cough
  - Change in voice
  - Nausea
  - Chest pain

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Heartburn & Reflux: Symptoms to Consider

Frequently missed mimickers of GERD

- **Rumination syndrome**
  - Effortless regurgitation of food that was just chewed and swallowed
  - Responds to diaphragmatic breathing
- **Achalasia**
  - Pathologic failure of lower esophageal relaxation associated with esophageal body peristaltic abnormalities
  - Can have regurgitation symptoms
    - With difficulty swallowing, can be associated with aspiration

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Heartburn & Reflux: Symptoms to Consider

Frequently missed mimickers of GERD (Cont'd)

- **Gastroparesis**
  - Delayed stomach emptying, most often idiopathic
  - May complain of regurgitation of stomach contents while supine
- **Supragastric belching**
  - Air is predominant complaint
  - Consider diaphragmatic breathing exercises

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Heartburn & Reflux: Symptoms to Consider

- Before attributing typical or atypical GER symptoms to GERD, consider disease of other organ systems and alarm signs
- Do not forget cardiovascular disease, including myocardial infarction!

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Heartburn & Reflux: Symptoms to Consider

- Alarm signs should generally prompt endoscopy
  - Painful swallowing (odynophagia)
  - Difficulty swallowing (dysphagia)
  - Proton pump inhibitor (PPI) refractory symptoms
  - Weight loss
  - Melena, particularly with history of condition predisposing to malignancy
    - Smoking or Barrett's esophagus

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Heartburn & Reflux: Commonly Employed Diagnostic Modalities

Diagnostic testing modality	Considerations and recommendations
Endoscopy	• To exclude erosive esophagitis • May miss anatomic abnormalities • When there are alarm signs ○ Weight loss, dysphagia, melena, anemia • PPI-refractory symptoms • For Barrett's esophagus risk factors (male, white, persistent GERD, obese, middle-aged), even if symptoms controlled • To place wireless pH monitoring
Esophagram/ Upper GI series	• Can detect structural abnormalities ○ Hernias, strictures/stenoses • Abnormalities of esophageal motor function • Not recommended to diagnose GER

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Heartburn & Reflux: Less-Commonly Employed Diagnostic Modalities

Diagnostic testing modality	Considerations and recommendations
High resolution manometry	• Identify esophageal motor abnormalities of pathologic GER • Guide catheter-based ambulatory reflux and impedance monitoring • Indicated prior to lung transplantation or anti-reflux procedures
Catheter-based ambulatory reflux/ impedance monitoring	• Diagnoses reflux hypersensitivity or functional heartburn, which may respond to neuromodulation ○ Tricyclic antidepressants, SSRIs, SNRIs, trazodone
Wireless-based ambulatory reflux monitoring	• Only provides information on acid exposure time, association of acidic reflux w/ symptoms • Requires endoscopic placement • Capsule can become dislodged, especially during placement, and require bronchoscopy to remove

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GERD: Management Approaches

Approach	Type	Examples
Non-medical Management	Lifestyle modification	• Avoid triggers like coffee, alcohol, fatty or acidic foods • Avoid NSAIDs • Elevate head of the bed
	Psychosocial interventions	• If stress is high, consider relaxation, guided imagery, progressive muscle relaxation, mindfulness-based stress reduction
	Integrative interventions	• Licorice • Ginger

GERD: Management Approaches

Approach	Clinical setting	Examples and comments
Medical Management: First-line pharmacotherapy	PPI naïve without alarm signs, infrequent symptoms	• Can use histamine-2 antagonists before pursuing further testing
	PPI naïve without alarm signs, frequent/ bothersome symptoms	• Before refer to GI can start PPI • Start once daily dosing 30 minutes before breakfast; increase to twice daily 30 minutes before breakfast and before dinner • Re-evaluate in 8 weeks; consider additional PPI doses, medications from other classes, and if diagnostic testing is indicated
	Stopping treatment	• Likely best to taper off PPI • If taking daily, reduce to every-other-day dosing for 2-4 weeks and as-needed histamine-2 antagonism then stop • If taking twice per day, reduce to daily dosing for 2-4 weeks before every-other-day dosing

GERD: Factors to Consider When Using PPIs in CF

- PPIs may reduce acid-related pulmonary damage or improve response to enzyme replacement in people with CF
- Risk of enteric infections, increased pulmonary exacerbations
  - Stomach acid is an important barrier to infectious disease
- Limited data of other adverse events such as bone density/fracture risk
- *Inappropriate PPI usage is common!*
  - May take it as needed, miss doses, or time inappropriately in relation to meals
  - Ask before considering someone treatment-refractory

GERD: Management Approaches

Approach	Type	Clinical setting
Medical Management: PPI alternatives	• Baclofen	• Regurgitation • Belching
	• Sucralfate	• Less frequently used • Impairs absorption of other medications
	• Neuromodulation ○ Tricyclic antidepressants, e.g., nortriptyline ○ Selective serotonin reuptake inhibitors ○ Serotonin norepinephrine reuptake inhibitors ○ Trazodone	• Chronic symptoms • No structural disease • Persistent symptoms on PPI • Functional heartburn • Reflux hypersensitivity

GERD: Management Approaches

Approach	Type	Examples and comments
Endoscopic & Surgical Interventions	Traditional fundoplication	• Surgical
	Transoral incisionless fundoplication (TIF)	• Endoscopic
	Sphincter augmentation with devices	• Linx: Surgically placed • Stretta: Endoscopically-performed induced muscular hypertrophy (controversial)

Adult Case Discussion: GI Symptom Management in a Model of Palliative Care for CF

- 43-year-old man with pancreatic sufficient CF
- FEV1%pred 80
- CF first diagnosed 5 years ago after years of recurrent pneumonia and sinusitis
- Annual palliative care needs assessment

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Adult Case Discussion: GI Symptom Management

- The patient completes the Integrated Palliative Care Outcome Scale (IPOS) as part of the annual needs assessment

What have been your main problems or concerns over the past week?
Stomach pain

How have the following symptoms affected you over the past week?	Not at all	Slightly	Moderately	Severely	Over-whelmingly
Nausea (feeling like you are going to be sick)	0	1	2 (circled)	3	4
Poor appetite	0	1 (circled)	2	3	4
Pain	0	1	2 (circled)	3	4

What else would you like to know?
What are your next steps in assessment?

Adult Case Discussion: GI Symptom Management

- 43-year-old man with pancreatic sufficient CF
  - *"Feels like acidy stuff comes up after I eat, especially at night. I've never had that before. Is it heartburn?"*
  - *"Doesn't happen every day but when it does, it's no good. This week my wife made chili and I barely slept."*
- Work has been more stressful lately

What's the most likely explanation?
- **What are you most worried about?**

What are your next steps in diagnostic assessment?
- **How urgent is further evaluation?**

Adult Case Discussion: Diagnostic Assessment

- Based on the characterization of symptoms
  - Moderate intermittent symptoms of heartburn and reflux
  - Symptoms are distressing, but no alarm signs
  - No prior treatment
- Decision made to defer endoscopy and treat empirically as Gastroesophageal Reflux Disease (GERD)
- Check liver tests and GGT to screen for CF-Related Liver Disease as part of routine CF care
- Review recommendations for earlier start to colonoscopy screening in people with CF

Adult Case Discussion: GERD Management

The GI Best Practice Guides include a range of primary palliative care interventions to consider in co-developing a comprehensive treatment plan

What interventions might you suggest?

- Lifestyle modifications
- Psychosocial interventions
- Integrative interventions
- Medical management or endoscopic/surgical interventions
- When to refer to a specialist

Consider simultaneous vs. sequential interventions.
Some may not be appropriate or acceptable to the patient.
Which CF team members might be helpful to engage?

Adult Case: Initial Interventions for GERD

Intervention Type	Examples
Lifestyle modification	• Avoid eating close to bedtime • Reduce triggers (spicy food) • Elevate head of the bed
Psychosocial intervention	• Problem solve recent job-related stressors that seem to exacerbate symptoms
Integrative intervention	• Prefers not to use medications • Wants to try caffeine-free ginger tea first
Medical management	• Agrees will try OTC histamine-2 blocker (famotidine) if ginger ineffective
Refer to a specialist	• Consult GI if signs & symptoms become refractory or urgent

3-Month Follow-Up: IPOS Responses

What have been your main problems or concerns over the past week?
Tried everything we talked about but have heartburn every day now

How have the following symptoms affected you over the past week?	Not at all	Slightly	Moderately	Severely	Over-whelmingly
Nausea (feeling like you are going to be sick)	0	1	2 (circled)	3	4
Poor appetite	0	1	2 (circled)	3	4
Pain	0	1	2 (circled)	3	4

Over the past week:	Addressed/ no problems	Mostly	Partly	Hardly	Not addressed
Have any practical problems resulting from your illness been addressed (such as financial or personal)?	0	1	2	3	4 (circled)

What else would you like to know? What are your next steps?
Does this new information change management?

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Adult Case Discussion: GERD Management Next Steps

- 43-year-old man with pancreatic sufficient CF, persistent heartburn; pain and nausea impacting appetite
- Called between clinic visits: Famotidine not helping
- Started on PPI, instructed to increase to twice daily, no benefit
- Recently started smoking again
  - Attributes to losing job, with resulting financial stress
- Assessment
  - Moderate GERD with no response to lifestyle modification, H2 blocker, and PPI in context of increased psychosocial stressors

What additional diagnostic evaluations or interventions might you suggest?

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Adult Case: Next Step Interventions for Persistent GERD

Intervention Type	Examples
Lifestyle modification	• Smoking cessation for GERD and pulmonary health
Psychosocial intervention	• Help access unemployment benefits • Teach guided imagery for relaxation
Integrative intervention	• Try chamomile tea after dinner to help sleep and settle stomach
Medical management	• Ensure taking PPI correctly (30 minutes before meals) and consistently • Schedule endoscopy
Refer to a specialist	• Consult GI specialist if remains treatment refractory, endoscopy abnormal, or signs & symptoms become urgent

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Alternate Case Scenarios: GI Symptom Management—GERD

- **What signs, symptoms, or diagnostic findings would you be especially alert for in this patient?**
  - What are you most concerned to rule out before continuing symptomatic treatment?
- **Would this case be managed differently if the patient had recently initiated highly effective modulator therapy?** How?
- **How might a case of worsening GERD present differently in an infant, toddler, or school-aged child?**
  - Would evaluation and management differ? How?

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Adult Case Discussion: GERD

- 43-year-old man with late-diagnosed, pancreatic sufficient CF, moderate GERD, recent job loss

What about the caregiver?

- Identifies wife as primary support
- Offer Brief Assessment Scale for Caregivers (BASC)

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BASC Responses From Wife

Rate your distress during this past month:	Not at all distressed	A little distressed	Some distress	A lot of distress	Does not apply
Distress of seeing how much your relative or friend's illness has changed your relationship	1	2	3 (circled)	4	0

Rate whether you agree or disagree … this month:	Agree a lot	Agree a little	Disagree a little	Disagree a lot	Does not apply
Taking care of my relative or friend has drawn the two of us closer together	1	2	3	4 (circled)	0

What else would you like to know?
What are your next steps in assessment?
What resources or interventions might you offer?
How would you discuss this with the patient and/or his wife?

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