

Guideline Goal

To provide a guide for standardization of care to improve morbidity, mortality, resource utilization and efficiency of care.

Key Points

- Narcotics are **NOT** recommended for management of abdominal pain syndromes.
- CT Scans are **NOT** routinely recommended.
- Most abdominal pain syndrome patients should be treated as an outpatient.
- This guideline is for diagnosis of exclusion and may require chart review for previous workup.

Patient with non-specific or recurrent abdominal pain
(See Page 3 for Definitions)

Diagnostic tests should be guided by the history and physical examination. If vitals are reassuring and exam is non-specific, consider the following work-up

ED Labs

- Comprehensive metabolic panel, complete blood count, lipase, urinalysis and lactate.
- Obtain toxicology screen urine / UDRG.
- If diarrhea (and not on stool softeners/laxatives) consider stool culture/C diff.
- Consider an ESR and CRP if suspecting an inflammatory cause.
- Obtain bHCG for women of childbearing age.

Imaging

- Consider Abdominal X-ray if concerns for obstruction (sensitivity is limited for partial obstruction).
- Abdominal CT and/or Abdomen and Pelvis CT are **NOT** routinely needed **UNLESS** exam and labs are concerning for acute process OR patient has *not* previously received a CT for work-up of abdominal pain.
- Consider outpatient endoscopy (EGD) and colonoscopy for patients with symptoms lasting greater than 8 weeks and not done previously.
- In women of childbearing age and symptoms localized to the pelvis, consider pelvic ultrasound.

NOTE: If patient has had unremarkable CT abdomen/pelvis, EGD, and colonoscopy that were normal in the past year, and there are no new red flag symptoms, these tests generally do not need to be repeated.

ED Management

- Symptomatic management should be offered for pain and nausea, but opioids should be avoided because of likelihood of addiction and possibility of narcotic bowel syndrome.
 - Tylenol, a trial of ibuprofen or IV/IM ketorolac (if PO not tolerated) may be tried if there are no contraindications to NSAIDs.
 - Nausea should be treated aggressively with 4-8mg IV ondansetron or oral Compazine.
 - IV fluid hydration.
 - Oral Challenge (e.g., 4-6 ounces of liquid and crackers).
 - Many patients reports heat to the abdomen provides some relief and may be offered.
- All patients on chronic opioids should have an OARRS report pulled.
- If diagnosis of Abdominal Pain Syndrome is determined, add to the Patient Problem List

Admission Criteria*

Admission is indicated for **1 or more** of the following:

1. Persistent inability to tolerate oral intake despite adequate anti-emetics and requiring IV inpatient hydration.
2. The clinical course necessitates an inpatient evaluation that requires the patient to not eat or drink for extended period (e.g., more than 24 hours).
3. Additional significant finding or clinical condition judged too persistent (e.g., insufficient improvement or worsening despite initial intervention or treatment for up to 24 hours) to be within scope of observation care, including **1 or more** of the following:
 - Concern for evolving intra-abdominal pathology not seen on imaging that requires serial abdominal exams.
 - Severe electrolyte or lab abnormalities requiring inpatient care

If your patient meets criteria for admission based on #2 or #3 they not longer meet criteria for this guideline.

*Source: Milliman Care Guideline Criteria for Undiagnosed Abdominal Pain

Admit to General Medicine 6 (Hospital Medicine) Service, if possible

Hospital Day 1 – Acute pain unrelieved by symptomatic treatment

- Screen for more imminently dangerous structural or physiologic causes of abdominal pain requiring acute hospital intervention, if not completed in emergency department.
- Ensure hydration and level of functioning would support safe discharge to an outpatient care setting.
- Review medical records to determine patient behaviors and previous management.
- Consider collateral history from family/significant others.
- NPO, IV Fluids
- Initial pain relief should rely on non-pharmacologic approaches and non-opioid medications – See Appendix A pain management recommendations.
 - If no relief by non-opioid medications, judicious use of oral or if absolutely necessary, IV opioids
- Rates of co-occurring depression and anxiety are increased in this population. Dynamic monitoring of patient participation and distress throughout admission is key.
- Start discharge planning

Consider additional screening

- Patient Health Questionnaire -9 ([PHQ-9](#)) Depression Screening
- Generalized Anxiety Disorder 7-item ([GAD-7](#)) scale
- NIDA Drug Screening Tool ([Addiction Screening](#))

Consults for Consideration

- **Psychiatry** consult for severe or treatment resistant anxiety and depression symptoms, or if active symptoms are preventing safe discharge
- **Social Work** consult
- **Gastroenterology** consult if admitted with uncontrolled pain with concern for occult intra-abdominal pathology or previously incomplete work-up.

Hospital Day 2 – Pain improved or managed / Surgery not indicated

- Liquid or advance diet as tolerated. Lactose free diet is encouraged.
- Oral hydration
- Oral medications
- Discharge if education is understood

Discharge Planning

Outpatient referrals

- Referral to Comprehensive Pain and Headache Center
- Referral for Addiction assessment as necessary ([Local Opiate Treatment Resources](#))

Follow-up appointments

- Primary Care (1 week)

Patient Education

- Review handouts to promote patient understanding of their pain syndrome and likely triggers.
- Dietary changes established with nutrition during the hospitalization

Guideline Rationale

Patients diagnosed with functional abdominal pain have high numbers of emergency room visits and hospital admissions, lost productivity, and reduced quality of life. These patients also have increased length of stay and readmission rates.

Some patients have underlying gastrointestinal disorders with functional abdominal pain concurrent. If their gastrointestinal illness does not seem to be active, these patients are likely experiencing functional abdominal pain. This guideline is for patients of which no other diagnosis other than functional abdominal pain can be made.

Definitions

Common Abdominal Pain Syndromes

- **Centrally Mediated Abdominal Pain (CAPS):** formerly Functional Abdominal Pain, is characterized by continuous, nearly continuous or frequently recurrent abdominal pain that is often severe and only rarely related to gut function. These disorders are diagnosed after an initial careful history and physician exam has ruled out alternative diagnosis or red flags suggestive of inflammation or bleeding.
- **Opiate-Induced Gastrointestinal Hyperalgesia/Narcotic Bowel Syndrome (NBS):** chronic or recurring abdominal pain that paradoxically develops or increases with continuous or increasing doses of opioids.
- **Irritable Bowel Syndrome:** is abnormal hypersensitive pain perception and irregular motility in the GI tract, resulting in intermittent severe cramping abdominal pain.
- **Cyclic Vomiting:** Episodes of severe vomiting without an apparent cause.

Quality Measures

- Percent discharged from the ED
- Length of stay
- ED return visits with 30 days
- Readmission rate within 30 days
- Abdomen and Pelvis CT rates
- PO and IV narcotic use
- Consult to Integrative Medicine or Acupuncture

Tools and Resources

- [Ohio Automated RX Reporting System](#) (OARRS)
- [OARRS Guideline](#)
- [When to Check OARRS](#)
- OSUWMC [Prescribing Controlled Substances and the Use of the OARRS Database Policy](#)
- OSUWMC [Inpatient Management of Potential Opioid Abuse and Diversion](#) Guideline
- Nursing Standard of Practice: [Pain Management](#)
- OSUWMC [Aromatherapy Policy](#)
- OSUWMC [Guided Imagery Policy](#)
- OSUWMC [Healing Touch Policy](#)
- [Local Community Resources](#) for Opiate Treatment
- [CDC Pocket Guide: Tapering Opioids for Chronic Pain](#)
- [Interagency Guideline on Prescribing Opioids for Pain](#)

IHIS Resources

- Orderset – pending

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Guideline Approved

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Disclaimer: *Clinical practice guidelines and algorithms at The Ohio State University Wexner Medical Center (OSUWMC) are standards that are intended to provide general guidance to clinicians. Patient choice and clinician judgment must remain central to the selection of diagnostic tests and therapy. OSUWMC's guidelines and algorithms are reviewed periodically for consistency with new evidence; however, new developments may not be represented.*

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Appendix A: Pain Management

Non Pharmacological	Pharmacological
<ul style="list-style-type: none"> • Successful treatment of functional pain requires an effective patient-physician relationship in which treatment goals are set. • Studies are limited but efforts to reduce stress (through exercise/yoga and meditation) are recommended. • Many patients also report relief with a topical heat application, such as a heating pad or warm water bottle. • Acupuncture and manual treatments (including Osteopathic Manipulation Treatment (OMT), and therapeutic massage can be beneficial for decreasing pain and reducing stress secondary to pain. • A 'Mind –Body Recordings' cards can be provided to the patient. These cards list downloadable recordings of different meditation and relaxation practices put together by OSU Integrative Medicine faculty and which patients can use for free. 	<ul style="list-style-type: none"> • Consider Tylenol or trial of NSAIDs if patient has normal gut and kidney function • Low-dose Tricyclic Antidepressants provide the most analgesic benefit (Table 1). Start with low dose TCAs or SNRIs. Reevaluate benefit at 4-6 weeks. If limited benefit, increase dose and reevaluate in 4-6 weeks. If still ineffective or minimally effective, consider changing agents or adding an augmenting agent. • Avoid opioids (potential to induce narcotic bowel syndrome). <ul style="list-style-type: none"> ○ Consider contribution of central hyperalgesia related to Narcotic Bowel Syndrome in patients taking >75 Oral Morphine Equivalents for more than a couple of weeks. • If prescribing opioids, obtain OARRS Report and urine drug screen if not already completed in ED. • If patient is on long term opioids: <ul style="list-style-type: none"> ○ Continue their current dose ○ Monitor for opioid withdrawal ○ Inform patient that all attempts should be made to wean off of opioids: <ul style="list-style-type: none"> ▪ CDC Pocket Guide: Tapering Opioids for Chronic Pain ▪ Interagency Guideline on Prescribing Opioids for Pain ○ Consider screening for addiction ○ Strongly consider personal communication with the patients PCP or narcotic provider to discuss benefits of opioid taper and referral to Addiction Services

Table 1. Centrally Mediated Abdominal Pain Syndrome: Primary Pharmacologic Treatment

Class	Examples	Dose	Onset	Comments
Tricyclic Anti-depressants (TCAs)	Amitriptyline, desipramine, nortriptyline	25 mg QHS, starting dose	2-4 weeks	<ul style="list-style-type: none"> ▪ The most effective pharmacologic option for CAPS ▪ Screening EKG needed prior ▪ Contraindicated if risk for suicide and bi-polar disorder
Serotonin Norepinephrine Reuptake Inhibitors (SNRIs)	Venlafaxine, duloxetine, Milnacipran (Savella)	Varies	2-4 weeks	<ul style="list-style-type: none"> ▪ Theoretical benefit in CAPS

Appendix B: Medication Table for Nausea and/or Vomiting

Drug	Dose	Scenario	Notable History / Physical Exam	Major Adverse Effects
Lorazepam (Ativan®) <i>Anxiolytic</i>	PO/SC/IV/PR: 0.25-1 mg q4h prn	Anxiety: <ul style="list-style-type: none"> ▪ Anticipatory nausea/vomiting ▪ Nausea as a manifestation of anxiety 	<ul style="list-style-type: none"> ▪ Nausea without vomiting or weight loss; history of severe nausea post chemotherapy; mood/anxiety disorder, significant history of nausea in youth 	<ul style="list-style-type: none"> ▪ Sedation, delirium, agitation
Metoclopramide (Reglan®) <i>Prokinetic</i>	PO/IV: 5-20 mg before meals and at bedtime (max 5mg QID in CrCl \leq 60ml/min)	<ul style="list-style-type: none"> ▪ Gastroparesis 	<ul style="list-style-type: none"> ▪ Small-volume emesis, early satiety, bloating, nausea with movement; h/o neuropathy, hypothyroidism, or diabetes mellitus; peritoneal carcinomatosis 	<ul style="list-style-type: none"> ▪ Akathisia, EPS, colonic GI obstruction (risk of perforation in complete GI obstruction)
Dexamethasone (Decadron®) <i>Corticosteroid</i>	PO/IV: 2-32 mg/day in divided doses	<ul style="list-style-type: none"> ▪ Constipation 	<ul style="list-style-type: none"> ▪ Crampy abdominal pain ▪ Large/infrequent vomitus that relieves nausea ▪ Decreased frequency of BMs ▪ Abdominal fullness and distension ▪ Hard stools ▪ Straining with defecation ▪ Abnormal BS ▪ Fecal impaction 	<ul style="list-style-type: none"> ▪ Acute: agitation, nausea, hyperglycemia, immunosuppression
Hyoscyamine (Levsin®) <i>Anticholinergic</i>	SL/PO: 0.125-0.25 mg q4hprn			<ul style="list-style-type: none"> ▪ Sedation, dry mouth, urinary retention, constipation, delirium
Glycopyrrolate (Robinul®) <i>Anticholinergic</i>	IVSC: 0.1-0.2 mg q6h prn or PO: 1-2 mg q6h prn			<ul style="list-style-type: none"> ▪ Akathisia, EPS, QT prolongation (in high doses)
Prochlorperazine (Compazine®)	PO/IV: 5-10 mg q6h prn PR: 25 mg q6h prn			
Haloperidol (Haldol®)	PO/IV/SC/PR: 0.5-2 mg q4h prn			
Famotidine (Pepcid®) <i>H₂ antagonist</i>	PO/IV: 20 mg daily to BID (Use 50% of dose once daily in CrCl <50ml/min)	<ul style="list-style-type: none"> ▪ GERD ▪ Reflux 	<ul style="list-style-type: none"> ▪ Esophageal burning ▪ Sour taste in mouth, worse when supine ▪ Epigastric pain radiating to back ▪ Fever ▪ Diarrhea ▪ Dark, tarry stools 	<ul style="list-style-type: none"> ▪ Delirium
Pantoprazole (Protonix®) <i>PPI</i>	PO/IV: 40 mg daily to BID	<ul style="list-style-type: none"> ▪ Reflux ▪ GERD ▪ PUD 		<ul style="list-style-type: none"> ▪ Headache, Diarrhea
Ondansetron (Zofran®) <i>5HT₃ antagonist</i>	PO/IV: 4-8 mg q4-8h prn	<ul style="list-style-type: none"> ▪ Post-operative nausea 		<ul style="list-style-type: none"> ▪ Headache, Constipation
Olanzapine (Zyprexa®)	PO: 2.5-10 mg daily	<ul style="list-style-type: none"> ▪ Infection ▪ Medications 		<ul style="list-style-type: none"> ▪ Sedation, orthostatic hypotension, weight gain, hyperglycemia

Abbreviations: 5HT=serotonin; EPS=extrapyramidal symptoms; H=histamine; PPI=proton pump inhibitor

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