Video Consultations: Clinical Modules
Abdominal assessment

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Abdominal pain is a common presentation with a broad differential from self-limiting to life-threatening conditions.

- Is it acute, sub-acute, chronic, or recurrent?
- A good history is key to diagnosis.
- If age 60 or above, higher risk of serious conditions and most will need to be seen in-person if pain persists > 24 hours.
- Where possible, ask the patient to have a 2nd person in the video consult.
- If the “jump test” is positive, likely to need an in-person consult.

While not diagnostic, the location of abdominal pain can be a clue to common or important causes of abdominal pain as shown in the image above.

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IBD = Inflammatory bowel disease and IBS = Irritable bowel syndrome
Red flags

Paediatric

- Signs of shock, sepsis or peritonism
- Young infant with significant pain
- Bile-stained vomiting
- >48 hours delayed passage of meconium or symptoms within 2 weeks of birth
- Passage of toothpaste or ribbon stools
- Abdominal distension and vomiting
- Unexplained weakness, deformity, neurological findings
- Weight loss or inadequate weight gain

Adult

- Sudden, severe pain or pain on touching the abdomen
- Black or bloody vomit or faeces
- Finding it hard to breathe or any tightness/heaviness in the chest
- Unexplained weight loss
- Elderly – presentation can be different, lacking classical symptoms and signs, and presenting later
- Immunocompromised – can present atypically, and unique complications can arise.

ABDOMINAL EXAMINATION

A thorough abdominal exam can be done via Telehealth.

Providers can easily identify abdominal emergencies that would require an in-person or emergency room visit.
### History and functional assessment

- When did it start? Onset, frequency and duration?
- Abdominal pain: Ask the patient to describe in their own words, and point to the affected area:
  - Location. On one side? Any radiation, travelling or referred pain?
  - Nature — sharp, stabbing, dull ache, burning...
  - Is it constant or does it come and go? Any change? What can make the pain or symptoms better or worse? E.g. coughing, moving, eating
  - Severity — scale of 1-10
  - Timing — does it occur in association with anything else? E.g. eating, exertion
- Females: consider possibility of gynaecological and pregnancy-related conditions

### Symptoms and severity

- Systemic symptoms: fever, night sweats, rapid or unexplained weight loss (or gain)
- Vomiting and/or nausea → if present, ask about last meal and types of food eaten in the past 24 hours. Appearance of vomit, and frequency — any blood? ‘Coffee grounds’?
- Any change in bowel habits? Constipation or diarrhoea. Appearance or bowel movements, and frequency — any blood? Or black tarry stools? Mucous?
- Bleeding
- Ask if abdomen soft or firm, tender, normal size/distended (mindful that this is self-reported)
- Any changes? - appetite, intolerance to certain foods, swallowing

### PMHx and co-morbidities

- Any pre-existing conditions/comorbidities that may put them in a higher risk group, or explain any of the symptoms
- Relevant past medical history — history of gastrointestinal disorders, previous surgery and/or scarring

### Medication history

- Medication history — almost all medicines can cause gastrointestinal side effects
- Medications that increase their risk or may need adjustment e.g. immunosuppressants, anti-coagulants
- Over-the-counter (OTC) medicines, dietary supplements/vitamins should also be considered e.g. magnesium can induce a dramatic laxative effect. Many people also buy NSAIDs as an OTC.

### Social history and lifestyle risk factors

- Nutrition/diet
- Alcohol consumption
- Caffeine intake
### Observations/examination (video gives lot more information)
- Assess, where possible, patient’s appearance and demeanour
- Any sign of systematic illness? Any SOB?
- Temperature, pulse, RR, BP (often can measure some of these at home)
- Inspect via camera, and ask patient about any bulges/masses
- Ideally, ask patient to lie down on a bed or couch to examine their abdomen
- Guide patient in palpating suspected areas of tenderness.
- Jump test — a small jump without pain suggests peritonitis is unlikely. Document this. Also note how quickly and easily they can get up out of a chair or off the bed. Does this movement cause pain?
- Wearables/apps — is any further information available such as heart rate variability, sleep patterns etc.
- Screenshots — if PMS allows, taking a screenshot of patient pointing to where their pain is can be useful for comparison later if ongoing symptoms.

### Differential diagnosis
- Pain in the epigastric region (upper abdominal) — consider myocardial infarction
- Pain in the right or left lower quadrants in women of child-bearing age — consider ectopic pregnancy. Menstrual history can be helpful but doesn’t rule out pregnancy in all instances.
- Appendicitis — most prevalent in 10-19-year olds, but increasingly common in ages 30-69. Findings of interest:
  - Location of pain roughly halfway between top of hip and umbilicus
  - Migration of pain gradually to the right of the abdomen
  - Guarding / tensing abdominal muscles to palpation

### Follow up & tests
- Explain your working diagnosis and any important DDx that need to be excluded.
- Organise any tests that are needed, e.g., pregnancy test, FBC, ESR or CRP, faeces test, urinalysis

### Treatment, self-care advice and safety netting
- Are there any OTCs, or medications that are safe and appropriate?
- Organise prescription
- Provide self-care advice. Hydration, fluids, food, rest/keep active
- Provide link to further information e.g. Health Navigator - abdominal pain
- Check you were clear and the patient/family know the next steps
Age matters

Paediatric

Consider referred pain and non-abdominal causes such as:

- Basal pneumonia
- Type 1 diabetes
- Tonsillitis
- Food allergies
- Testicular torsion
- Sepsis

**VIDEO:** Approach to abdominal pain in children (Learning in 10; June 2020)

Adult

Consider non-abdominal causes e.g. acute MI

Age 60 or over — higher risk of serious conditions e.g., cancer, pancreatitis etc. If pain persists over 24 hours or severe pain, likely to need follow up in-person assessment.

**Take-home — resources to give patient**

Health Navigator: Abdominal pain
Health Navigator: Diverticular disease and diverticulitis
Health Navigator: Constipation
Health Navigator: Irritable bowel syndrome
Health Navigator: Abdominal pain in children - chronic
Video guides and learn more

VIDEO: How to conduct an abdominal exam through telemedicine (Dr Tania Elliot, April 2020)

VIDEO: Telehealth Physical Exam: Abdominal (Bear in mind strategies, May 2020)

References

Abdominal pain in childhood (Starship)
Auckland Regional Pathways: Acute abdominal pain in children
Auckland Regional Pathways: Gastroenteritis in children
Auckland regional pathways: Constipation in children
Approach to abdominal pain in children Learning in 10
UPMC: Stomach Pain