



University of
BRISTOL

MB ChB Programme

Abdominal Symptoms block

GP teacher guide, Effective Consulting, Year 2

Academic Year 2018-2019



Introduction and link to course and teaching information
Clinical Contact, Primary Care in Teaching Block Two, Year 2 2018-19

Dear GP tutor,

Thank you for teaching Year 2 students in 2018-19 and welcome to this session guide for the Abdominal symptoms block.

All the main information on the course is available in the year 2 18-19 GP handbook so please refer to this for information on how key dates, how the course is structured including assessment, your role, expectations of your students and teaching tips such as giving feedback. This is available here:

<https://www.bristol.ac.uk/media-library/sites/primaryhealthcare/documents/teaching/handbooks/Year%202%20Effective%20Consulting%20Primary%20Care%20Teacher%20Guide%202018-19.pdf>

This also contains information on the support that is available for students, however I am always happy to discuss any student you have concerns about.

This session guide outlines the learning outcomes for the students' time with you, key information about teaching history and examination, and a menu of options for other activities you can do with your students. Students will come to you during the *second* week of their Case Based Learning cycles. Students alternate between clinical contact in Primary Care with sessions in Secondary care for each Case Based block, so if they are with you for the Abdominal symptoms block, they will be in the hospital setting for the next case. A table of dates with the topic for the session is on page 4.

Please bring in 2 patients with conditions relevant to the symptoms the students are learning about to help students learn how to talk with and examine patients to find out what is wrong with them, apply their understanding of anatomy and physiology, and practice making diagnoses. It is *particularly* important that you run through a systematic examination with your students as they have little other chance to practice. Communication, history and examination skills will be assessed by an OSCE examination in May 2019.

If you have 6 students, you may find it easier to divide the group. Some GP teachers use an additional room and allow 3 students to spend time talking to one patient, while they run through the examination on another patient with the other 3 students, then swop over.

I am always happy to be contacted if you wish to discuss any aspect of the course and welcome your comments, feedback and suggestions. With all best wishes for teaching in the year ahead.

Dr Jessica Buchan

GMC Outcomes for Graduates

The GMC have updated guidance on what they expect newly qualified doctors to be able to know and do. The outcomes have been aligned to Good medical practice and are categorised as professional values and behaviours, including professional and ethical responsibilities and patient safety; professional skills including communication and interpersonal skills and diagnosis; and professional knowledge. Please be familiar with this document:

https://www.gmc-uk.org/-/media/documents/dc11326-outcomes-for-graduates-2018_pdf-75040796.pdf

The outcomes of particular relevance to teaching in Clinical Contact in Year 2 are; 2d, e, j & u. 5a, b & d. 6a. 7b & h. 10a. 11a, b, c & d. 12. 13. 14a, b, c & d. 20. 22b & c. 23a, c, d, & e. 24d & e. 25a

Structure of the Effective Consulting Day and Key Dates

The ILOs for each EC day covered in this session plan cover the whole EC day, which is delivered to varying degrees by lecture, EC lab and clinical contact. If the students are with you for the morning, they will have a lecture and practice specific consulting skills in a tutorial group with actors in the afternoon, if you have students in the afternoon, they will have already had a lecture and practised consultation skills. This means that if you have afternoon students you may notice that they are better prepared, but if you have morning students, they benefit from having their learning “primed” by meeting real patients prior to their small group tutorial in the afternoon.

Clinical contact alternates for each student in each CBL “case” between primary and secondary care. We try and align the teaching across settings much as possible.

In both primary and secondary care students should:

- Have a brief tutorial (to orientate the students to the task)
- Meet patients to practise focused gathering of information from history and examination and consider clinical reasoning.
- Present back the patients they’ve met
- Be helped to consider the patient perspective, impact of the illness or problem on patient lives, and to consider what support and future needs patients have.
- Be starting to consider variations in presentation, differential diagnosis and what they might do next.
- Get feedback on any observed history and examination, and on their clinical reasoning and presentation skills
- Debrief in the group (usually without the patient present) to ask questions and consolidate learning.

Dates	Case Based learning symptom	Key learning goals in clinical contact	Types of patients
Thursday 28 th February 2019	Abdominal symptoms	Causes of abdominal pain, change in bowel habit and blood loss from the GI tract. Asking sensitive questions. Urinalysis	At least one patient with current or previous significant abdominal symptoms and one patient suitable for abdominal examination (with or without abdominal signs)
Thursday 14 th March 2019	Low mood	Assessing mood in clinical practice	2 patients with history of mood disorder
Thursday 28 th March 2019	Joint pain including back pain	Clinical presentation and assessment of joint pain (including back pain)	Patients with arthritis, or joint pathology or replacement. Patient suitable for examination.
Thursday 9 th May 2019	Urinary symptoms and thirst	Clinical presentation and assessment of diabetes and renal pathology	Patients with diabetes, chronic renal disease, dialysis.
Thursday 23 rd May 2019	Headache	Clinical presentation and assessment of patients with headaches. Cranial nerve examination.	Patients with recurrent headaches e.g. migraines or previous significant headache e.g. Temporal arteritis, Subarachnoid haemorrhage, stroke/raised ICP. Any patient for examination or patient with abnormality of cranial nerves.
May 29 th /30 th	OSCE EXAM		
Thursday 13 th June 2019	Collapse	Assessment of patient with history of collapse. Neurological examination	Ideally patient with previous collapse (fit or faint) from any cause including seizure.

Framing teaching the medical history and examination in the “Clerking Consultation” & COGConnect

Medical students do not yet “consult” with patients as such, as they are still learning how to. Instead, on the Effective Consulting course we talk about the “*clerking consultation*” they “*clerk*” patients for training purposes in part to learn about medicine from the patient's narrative—what happened, what symptoms the patient experienced and what the outcome was. In this way student doctors build up a bank of illness scripts. We know the more exposure student doctors get to patients, the more experience they build up, so we are very grateful you help provide this experience. They also practice speaking to patients to learn *how* to talk to patients and assess problems—in other words they are learning *how* to consult. Therefore, here in Bristol we call the process the *clerking consultation*, as we want to emphasise the active hands on practice students get in consulting. You can help this process by spending some time directly observing the students speaking to patients, and by listening to them presenting summaries back to you. Where you have

observed, please give feedback not only on the content of the clerking, but on the process. It's also particularly helpful to students learning if you get them to commit to what they think is going on and what they might want to do next—to start student “*thinking like a doctor*”.

In MB21 in Bristol we have taught the medical students to think about all aspects of consulting with patients, we call this systematic approach COGConnect. This describes the different stages of consulting with patients that we want students to consider whenever they meet patients. We would be grateful if you could highlight these stages in your feedback.

Preparation: It has been emphasised to students that any clinical encounter begins with preparation. A doctor will prepare to see their next patient by reading the notes, a referral letter, perhaps looking at the medication screen. Doctors also prepare themselves to see the next patient perhaps they have just had a difficult consultation or need to finish a task before calling in the next person.

You can help students think about this stage when they prepare to see the patient you are bringing in.

Example questions to discuss with students to consider preparation:

As a GP, when you find out the next person on the telephone or waiting to see you has got abdominal pain...how do you prepare? What do you need to do or know before you phone the patient or call them in? What information is particularly useful and why?

Preparing the students for meeting the patients today: Discuss any brief information you want the students to know before they see the patient. Briefly recap main causes of abdominal pain or change in bowel habit and the GI history and examination—what information will they want to find out from the patient? Do they have any questions?

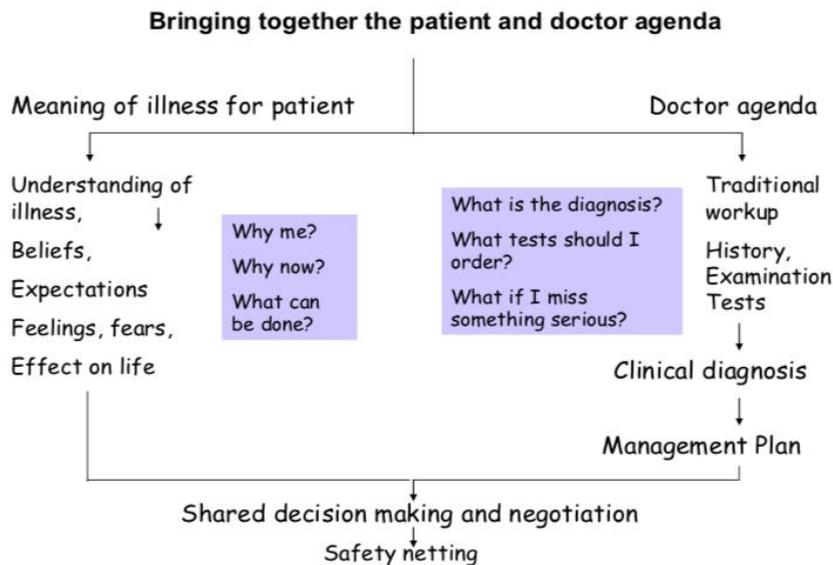
Preparing the patient: Please prime the patient as to where to start their story and what to focus on. For example, if the patients have multiple problems you may need to tell the patient that the students are particularly interested in when they were admitted to hospital with their condition. You may also want to say how much information to give, for example “Please don't tell them straight away that you have IBD, just start by saying what symptoms you had and how you felt. They will ask you some questions and try and work out what might have happened to you.”

Opening: All the students should be familiar with introducing themselves to the patient, checking the patients details and asking permission to talk to/examine the patient. Remind them to do so if they do not do this automatically. They should make sure the patient is comfortable, knows what is going to happen e.g. how long it should take, and start with open questions and attentive listening.

Gathering: We teach students to “*gather information*” around a presenting problem. The medical history is an essential, structured *part* of gathering information that students need to learn and learn how to adapt for different situations. We emphasise that the medical history is one part of broader assessment of patients' problems including information from the notes, observation of the patient's presentation and non-verbal communication, examination findings, and results from investigations, and where appropriate, from third parties. We also want to emphasise that gathering is partly about *how* to find out information (the *process* which includes listening skills and how to phrase questions) as well *what* they find out (the *content*—which is forms the medical history).

Patients often come with a problem or problem list (which is not necessarily a symptom) and we want students to be able to form a holistic assessment of the situation. The GMC's outcomes for graduates does require that newly qualified doctors can “*elicit and accurately record a patient's medical history, including family and social history (Outcome 11a)*” but of note is that graduates should be able to “*work collaboratively with patients, their relatives, carers or other advocates to*

make clinical judgements and decisions *based on a holistic assessment of the patient and their needs, priorities and concerns, and appreciating the importance of the links between pathophysiological, psychological, spiritual, religious, social and cultural factors for each individual (Outcome 14)*



When students learn to gather a comprehensive assessment of the patient through systematic history and examination, they need to continue to consider the patients understanding, beliefs, fears, expectation and impact of the problem on their lives. Sometimes as they learn a “list” of questions to ask they can start to be so focused on remembering *what* to ask, they forget to respond to patient cues, for example a patient might respond to a question about smoking with the information that their Dad died from smoking related disease and the student ignores that to move on to asking about alcohol intake. Remind them to acknowledge what they are hearing and seeing. This is where you can help by spending some of the time observing the students talking to patients and giving feedback and helping the other students observe and give effective feedback to their peers.

Key consultation skills to practice

- Attentive listening, picking up cues
- Open and closed questions
 - Open questions tend to begin with ‘What, where, when and how?’
 - Closed questions tend to start with ‘Have you, did you, could you?...’
 - Questions starting with ‘Why’ are difficult for patients, better to say; ‘What made you think that?’ rather than ‘Why did you think that?’
- Jargon free language
- ICEIE – ideas, concerns, expectations, impact of the problem, and emotions. It is very important to understand where the patient is coming from, what they are worried about, what they need, and how the problem is affecting them.
- Clarification - what did the patient mean by saying ‘couldn’t breathe’?
- Summarising – This helps you to review the information you have already gathered, and the patient can tell you whether you understood correctly and what information is still missing.
- Acknowledgement: ‘I am sorry to hear that’, ‘That must have been difficult for you’

Formulating: What do I think so far, and what next?

Students may find it helpful to keep these questions in mind while talking to patients, and systematically consider them when they feel they have come to the end of the information gathering stage. You can ask your students:

1. Can you summarise what you have been told so far?
2. Does it tell a story from beginning to end?
3. Is the story unique to the individual and their situation?
4. Can you tell what the probable diagnosis is (main problem)?
5. And what is less likely (differential diagnosis)?
6. What is the worst thing it could be (What you must not miss, red flags)?
7. Do you know what the patient thinks is wrong? And what they worry about?

Here is an example for a patient that experienced breathlessness

GP	Students
"What is your diagnosis at this point?" A mind map might help	Students brainstorm possible diagnoses
How can you differentiate between these diagnoses?	Students ask questions about symptoms, and if breathlessness constant or intermittent, triggers, and associated symptoms
What do the symptoms sound like? What can we rule out at this point?	You might be able to rule out conditions based on the site or nature of the pain
What other questions could you ask to differentiate?	Pregnancy, urinary symptoms
What have you learned from asking those questions?	Ectopic pregnancy is unlikely as not sexually active
What is more likely/less likely	Biliary colic is a possibility
Would you like to ask more questions?	Students ask if they've ever had this type of pain before
What does that tell us about the diagnosis?	

Explaining

Are there any elements that the students could practise explaining to a patient or each other? E.g. how to do a mid-stream urine sample, or what biliary colic or irritable bowel syndrome is.

Activating

The students have been introduced to activating patients. By activation we mean empowering and motivating people to manage their own health. Different people need different interventions to feel more able to manage their health & wellbeing. You can read more here:

<https://www.kingsfund.org.uk/publications/supporting-people-manage-their-health>

When students meet patients with you, you can help them think about this by discussing areas of the patient's lifestyle or how they manage their condition that are ripe for intervention e.g. reducing alcohol intake, losing weight or changing their diet.

Planning

Try asking the students “If you had met this patient when they had just developed this symptom (e.g. abdominal pain) what would you do next?” Help them consider a wide range of options e.g. reassurance, further investigations, treatment, referral...

Doing

Some consultations have a procedure as part of them. In Primary care this might be a minor surgical procedure, or doing a joint injection, also taking a smear, doing an ECG, giving a flu jab. Over their training students will learn an increasing number of practical procedures.

Closing

Closing a clinical encounter needs specific skills. Students should be encouraged to help the patient summarise, ask any further questions, and make sure the patient is clear on what will happen next including follow up, getting results, hearing about a referral. They can practise safety netting for example in a patient with stable angina.

Integrating

This is the stage after the patient has left the room. Both doctors and patients “integrate”. For the doctor this is where they write up the notes, make a call to a colleague or write a referral letter, or look something up. Students can be helped to assess their learning needs at the end of the session.

Abdominal symptoms session guide for Thursday 28th February 2019
Primary Care Clinical Contact, Year Two 2018-19

Intended Learning Outcomes:

- Compare and contrast common causes of abdominal symptoms, and describe the key red flags in the assessment of abdominal symptoms
- Describe an approach for asking patients potentially sensitive questions
- Describe how to assess a patient's alcohol intake and offer information and advice in a way that activates patients to make healthy lifestyle choices
- Describe the basic steps in the routine examination of the abdomen, and the main physical signs of gastrointestinal disease
- Describe the correct technique for performing a urinalysis

Resources:

Hippocrates, the Bristol Medical School website, has section on the GI system. Don't miss the abdominal examination video. <http://www.bristol.ac.uk/medical-school/hippocrates/medsurg/gastrointestinal/> accessed 15.12.18. There are also e-tutorials on the acute abdomen and jaundice.

Suitable patients for the Abdominal symptoms block:

- Patients with chronic or recurrent conditions causing abdominal pain, jaundice or change in bowel habit.
- Also, patients with a previous episode of acute abdominal pain e.g. previous gallstones/pancreatitis/appendicitis etc
- For examination, any patient with relevant history but no current abdominal signs who is willing to be examined
- Patients with abdominal signs for examination inc previous scars

Abdominal symptoms session activities:

Introductory tutorial (30 minutes)

1. Assess learning needs; discuss the students' learning during their abdominal symptoms CBL case and what they feel confident in and what they want to practise.
2. Prepare for the session; brainstorm causes of abdominal symptoms e.g. pain, jaundice, change in bowel habit, the underlying pathology and how to assess and differentiate between causes. Identify specific history and associated features of the acute abdomen
3. Recap an overview of the medical history (overview is in year 2 18-19 GP handbook <https://www.bristol.ac.uk/media-library/sites/primaryhealthcare/documents/teaching/handbooks/Year%2020%20Effective%20Consulting%20Primary%20Care%20Teacher%20Guide%202018-19.pdf>).
4. Brief students on the first patient.

Patient one (30 minutes)

5. Patient One Arrives. Brief information on the patient you are going to see together. Allocate one student to practice gathering information (you might want to allocate one student to take over 1/2 way so that 2 students get a turn). The other students should be given observation tasks. One could look at content of the history (anything missed?), one could look at body language and non-verbal communication, and one could look at process e.g. active listening, building rapport with the patient. When the student/s have finished talking to the patient help them summarise what they have heard—can they tell the patients story?

BREAK—offer students a snack and drink and toilet break. (10 minutes)

6. Preparation for examination teaching. (10 minutes) Discuss with students how much examination practice have they had and what they would like to learn? Ask them to describe the abdominal examination.

Patient two (30 minutes)

7. Patient Two Arrives. Brief information on the patient you are going to see together. Introduce the patient to the students and briefly recap any medical information (but do not take a detailed history) Explain you want to show the students how to start to examine a patient. Demonstrate first talking through the steps and involve the students. Include verbal consent, making the patient comfortable and a systematic examination starting at the hands and moving to the face/neck then abdomen. Allocate 1 student to have a go or ask different students to do different parts of the examination—for example all students could have a go at auscultation.
8. Debrief, questions and identify further learning needs and resources.

Other options:

- Talk about your own experiences of patients presenting with acute abdomen, or abdominal symptoms; how you decide what is going on and how to manage?
- How do you approach “sensitive questions” in consultations e.g. bowel habit, sexual activity, weight?
- What nutritional advice do you give patients? How do you in your surgery help patients manage weight
- Bedside testing—when do you do urinalysis in patients with abdominal symptoms. Do the students feel confident instructing patients on collecting MSU and testing urine with multistix?

Tutorial notes (available to students via OneNote) Please note these are designed to be quick reference notes so are brief and **do not** replace core textbooks.

Asking sensitive questions

The gastrointestinal system covers several topics that students and patients may perceive to be sensitive areas;

- Weight
- Bowel habit
- Urinary symptoms
- Alcohol intake
- Chance of pregnancy
- Sexual history

Medical student anxiety may stem from not being used to asking about these topics, not knowing how to word questions or not knowing how patients will react. Patient anxiety may stem from embarrassment, worries about being judged, worries about confidentiality or being uncertain of the relevance of the questions they are being asked.

Techniques that decrease anxiety include:

- Explain why you are asking—you may need to address confidentiality
- Ask permission
- Normalise
- Talk in matter of fact, factual terms (not judgmental terms)
- Ask about specifics not generalisations
- Practise! Phrases.

Preparing the patient and setting the context	<p>“I need to ask you about your lifestyle to better understand your situation”</p> <p>“I need to ask you about your bowel habit to better understand how your gut is working”</p>
Asking permission	<p>“I always ask about alcohol intake because it has an important impact on overall health. Would it be okay if I ask you about your alcohol intake?”</p> <p>“Is it okay if I ask you some questions about your lifestyle?”</p>
Ask factual, specific questions.	<p>“How often do you open your bowels?”</p> <p>“Has your weight changed recently?”</p>
Avoid generalisations and judgmental questions e.g. “Do you eat a healthy diet?” “Do you get drunk”	<p>Instead:</p> <p>“Talk me through what you eat in a typical day?”</p> <p>“How many drinks containing alcohol do you typically have on a single occasion?”</p>
Normalise Discussing stool consistency with patients can be helped by using the Bristol stool chart see here: https://www.bladderandbowel.org/wp-content/uploads/2017/05/BBC002_Bristol-Stool-Chart-Jan-2016.pdf	<p>“Sometimes people notice blood in the stool or after they’ve opened their bowels, is that something you’ve ever noticed?”</p>
Assume the behavior is already happening (normalizing) but be careful as these are leading questions...	<p>“How often do you have a drink containing alcohol in an average week?”</p>
Closed questions and a “menu” of responses	<p>When asking sensitive questions closed questions can help relieve anxiety about how to answer as can giving a menu of responses. “Do you open your bowels; every day, several times a day, or do you go for a day or more without opening your bowels?”</p>

Causes of abdominal pain:

Anatomical method: Think about the anatomy of the abdomen from superficial to deep and the structures in the abdomen that cause abdominal pain. Consider the pathology that you are aware of in these structures and how pathology in the different structures cause different types of pain and different presentations.

Surgical Sieve Method: there are different mnemonics for this; for example, VITAMIN C:

1. **V**ascular
2. **I**nfective
3. **T**raumatic
4. **A**utoimmune
5. **M**etabolic
6. **I**diopathic / **I**atrogenic
7. **N**eoplastic
8. **C**ongenital

You should be aware of causes of abdominal pain including: dyspepsia, peptic ulcer disease, biliary colic, cholecystitis, pancreatitis, appendicitis, diverticulitis, inflammatory bowel disease, irritable bowel syndrome, Coeliac disease, bowel infarction, perforated viscus and peritonitis, tumours including bowel cancer, and abdominal aortic aneurysm (AAA).

You should also be aware of how to assess a change in bowel habit.

Abdominal pain in special circumstances. You should be aware of the following but will cover these later in greater depth: Renal causes e.g. Cystitis, renal colic, pyelonephritis. Gynaecological causes e.g. Ovarian cysts, Pelvic inflammatory disease, ectopic pregnancy, menstrual pain. Medically unexplained symptoms. Metabolic causes e.g. diabetic ketoacidosis. Paediatric causes e.g. abdominal migraine, mesenteric adenitis.

Key points in patients presenting with acute abdominal pain:

Abdominal pain may present in very different ways and has many different causes. Acute abdominal pain can be a sign of serious life-threatening conditions such as pancreatitis, appendicitis, abdominal aortic dissection or a perforated viscus. The following signs/symptoms suggest a serious cause of abdominal pain and the patient should be admitted to hospital:

- Severe abdominal pain especially if accompanied by signs of peritonitis (see below)
- Respiratory rate of 25 per minute or greater
- Heart rate greater than 130 beats per minute
- Systolic blood pressure less than 90mmHg, or diastolic blood pressure less than 60mmHg (unless this is normal for them)
- High temperature (especially if more than 38.5°C)
- Altered level of consciousness
- Evidence of a major bleed within the gastrointestinal (GI) system e.g. melaena, haematemesis, PR bleeding

Signs of peritonitis (see examination section for explanation of terms):

- pain on light palpation
- rebound tenderness
- involuntary guarding
- pain recurring with slight movement of the examining hand
- absent bowel sounds.

SOCRATES is a useful acronym to help students remember the questions to ask when a patient presents with pain...

SITE: Patients may find it difficult to localise the pain. the site of pain relates to the embryological origins of abdominal organs. Epigastric pain relates to foregut structures (stomach, duodenum, liver, pancreas, gallbladder). Periumbilical pain relates to midgut structures (small and large intestines including appendix). Suprapubic pain relates to hindgut structures (rectum and urogenital organs). A very localised pain may originate from the parietal peritoneum e.g. appendicitis when the inflammation spreads to the peritoneum overlying the appendix (pain moves from the midgut region)

ONSET: With sudden onset of severe abdominal pain you need to consider life threatening causes such as a perforated viscus or abdominal aortic dissection.

CHARACTER: Colicky pain (comes and goes in waves) indicates obstruction of a hollow muscular-walled organ e.g. intestine, gall-bladder, bile duct, ureter). Burning pain indicates an acid cause.

RADIATION: Gallbladder pain may radiate to the right scapula. Shoulder-tip pain occurs with diaphragmatic irritation. Radiation to the back may indicate pancreatitis or aortic dissection. Renal colic pain may radiate from the loin to the groin.

ASSOCIATED SYMPTOMS: Anorexia, nausea and vomiting are common but may be non-specific. Altered bowel habit may occur with irritable bowel syndrome, diverticular disease and colorectal cancer. Sweating, hypotension and tachycardia may suggest a perforated viscus or AAA dissection.

TIMING: Appendicitis may present with generalised central abdominal pain which then 'moves to' the right iliac fossa. Pain after eating suggests dyspepsia or biliary origin.

EXACERBATING/RELIEVING FACTORS: Pain exacerbated by movement or coughing suggests inflammation, patients may lie very still. Patients with colicky pain tend to move around or draw their knees up to their chest. Sitting forward may help with pain of a pancreatic origin.

SEVERITY: Consider a scale of 1-10.

History:

You should be familiar with the systematic medical history. What are the specific areas to cover in abdominal pain? What are the risk factors for abdominal disease?

- Assess the pain using SOCRATES
- Identify specific history and associated features of pancreatitis, appendicitis, abdominal aortic dissection or perforated viscus/peritonitis and distinguish from other causes of abdominal pain
- Associated abdominal symptoms
 - *Dysphagia* (difficulty swallowing): establish timeline and whether it occurs with liquid or solids.
 - *Nausea and vomiting*: vomit containing blood (fresh red or coffee-ground) suggests an upper GI bleed. Vomit containing bile (green) suggests an upper GI obstruction. Faeculent vomiting suggests a lower GI obstruction.
 - *Altered bowel habit*: it is important to establish what the patient's normal bowel habit and how it has changed. Ask about consistency, colour and frequency of stool. Establish the timeline. Ask about presence of blood (red blood or black, tarry stool (melaena)) and mucus.
 - *Jaundice*: yellowish discolouration of the skin, sclerae and mucus membranes. Ask about the colour of the urine and stool. Ask if patient has any itching (pruritus).
 - *Urinary symptoms*: frequency, dysuria, incontinence.
 - *Appetite and weight loss*
 - *Fever*
- Past medical history
 - Previous surgeries
 - Chronic bowel diseases e.g. Crohn's, ulcerative colitis
 - Associated conditions: cardiovascular risk factors may suggest AAA. Autoimmune conditions, such as type 1 diabetes and thyroid disease, may be associated with non-alcoholic fatty liver disease and autoimmune hepatitis
- Medications: many drugs affect the GI system or may be nephro- or hepato-toxic.
- Family history: Risk of certain conditions increases if a first-degree relative has the condition e.g. colorectal cancer, polyps, Crohn's, ulcerative colitis.
- Social history: What is their diet like? Excessive alcohol consumption is a modifiable risk factor for liver disease. Smoking is a modifiable risk factor for peptic ulceration, oesophageal cancer and colorectal cancer. Intravenous drug use, tattoos, foreign travel, blood transfusions, sexual history are risk factors for viral hepatitis.

Causes of abdominal pain:

Gastro-oesophageal reflux disease (GORD)/Dyspepsia: the pain is typically a hot, burning retrosternal (GORD) or epigastric discomfort (Dyspepsia). May be associated with an acid or bitter taste in the mouth, sudden filling of the mouth with saliva ('waterbrash'), nausea, bloating and belching. May be precipitated by lying down or bending forwards and by meals especially fatty or spicy foods. Relieved by antacids and proton-pump inhibitors.

Peptic ulcer: includes both gastric and duodenal ulcers. Characterised by epigastric pain and tenderness usually occurring 1-3 hours after eating. The patient may have an iron-deficiency anaemia due to a bleeding ulcer and may present with haematemesis or melaena (red flags).

Biliary colic is caused by gallstones getting stuck in the bile ducts. It is characterised by sudden onset, constant epigastric or right hypochondrium pain which may radiate to the right scapula. Despite the name, the pain is rarely colicky! The pain may be precipitated by eating and may last for up to 24 hours before resolving spontaneously.

Cholecystitis is inflammation of the gallbladder. The patient may have a history of gallstones or biliary colic. The pain may be similar to biliary colic but fever, vomiting and severe tenderness in the right hypochondrium make a diagnosis of cholecystitis more likely. May have a positive Murphy's sign (see below).

Pancreatitis: severe epigastric pain radiating to the back and associated with vomiting. The patient may be very unwell with epigastric or generalised tenderness, tachycardia and hypotension. A thorough alcohol history is very important.

Appendicitis: generalised periumbilical pain progresses to localised pain and tenderness in the right iliac fossa. Moving and coughing aggravate the pain. Associated with nausea, anorexia and low-grade fever.

Diverticulitis means inflammation of small outpouchings (diverticulae) from the wall of the colon. Most commonly presents with left lower quadrant pain and localised tenderness (more commonly right lower quadrant in Asian patients). Associated with fever, tachycardia and change in bowel habit (commonly diarrhoea which may contain red blood).

Inflammatory bowel disease includes Crohn's disease and ulcerative colitis. Usually presents with diarrhoea containing blood. The patient may also experience generalised or cramping abdominal pain, weight loss, fever and symptoms of anaemia.

Irritable bowel syndrome: chronic (at least 6 month) history of abdominal pain, bloating or change in bowel habit (diarrhoea or constipation). Abdominal pain may be relieved by defecation. Symptoms may be precipitated by stress. Examination findings are usually few and non-specific.

Coeliac disease is an autoimmune condition which is provoked by eating gluten. It presents with a range of symptoms including generalised abdominal pain, bloating, change in bowel habit (diarrhoea or constipation), weight loss, mouth ulcers and anaemia. The patient may notice that their symptoms are precipitated by eating foods containing gluten.

Bowel ischaemia/infarction occurs when the blood supply to an area of the gut is blocked. The patient will complain of moderate to severe abdominal pain but there may be little or no tenderness at the start – this is unusual given the degree of pain which the patient feels.

Tumours inc bowel cancer: tumours can affect any abdominal organ and present with pain. Bowel tumours may present with a change in bowel habit or bleeding from the GI tract.

Perforated viscus and peritonitis: a hole can form in any hollow organ in the abdomen and can be caused by a variety of conditions. Peritonitis is inflammation of the peritoneum and can be caused by a perforated viscus. The patient will experience sudden onset, severe pain and is likely to be very unwell. The patient will usually lie very still. See above for signs on examination.

Abdominal aortic aneurysm (AAA) dissection is a tear in the wall of the aorta. It usually causes a tearing, shearing pain which radiates to the back. Mortality is very high and patients usually present as an emergency.

Change in bowel habit:

A patient's bowel habit can change for a variety of reasons, some of which are serious. It is important to think about red flag signs and symptoms:

- Blood in the stool (red blood or melaena)
- Unintentional or unexplained weight loss
- Abdominal or rectal mass
- Anaemia
- Family history of bowel or ovarian cancer

Causes of a change in bowel habit include:

Bowel cancer: any change in bowel habit in an older adult should raise suspicion of bowel cancer. Patients may also present with any of the red flag symptoms mentioned above. Public health campaigns mean that patients may be aware of the symptoms of bowel cancer.

Infective diarrhoea: fever, recent contact with a source of infection (e.g. another person, contaminated food) or travel abroad may point to an infective cause of diarrhoea.

Irritable bowel syndrome: see above.

Inflammatory bowel disease: see above.

Coeliac disease: see above.

Bowel obstruction: obstruction of the bowel may be caused by many conditions including tumours, narrowing or twisting of the bowel, foreign bodies and hernias. The patient will present with absolute constipation (no flatus), vomiting, abdominal distension and generalised abdominal pain.

Abdominal Examination:



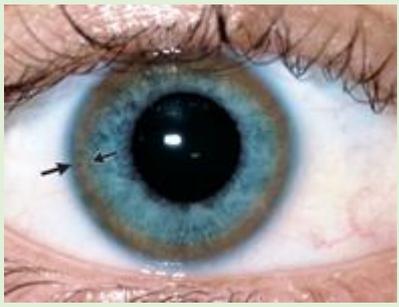
Setting up for examination	<p>WIPPPE</p> <p>Wash hands</p> <p>Introduce yourself and identify patient</p> <p>Permission – explain procedure and gain consent</p> <p>Position – initially at 45°, totally flat later in examination</p> <p>Pain – check that the patient is comfortable</p> <p>Exposure – adequately expose the whole upper torso (or at least from the bottom of the sternum to the symphysis pubis)</p>
General examination	<ul style="list-style-type: none"> • Look to see if the patient is comfortable or obviously in pain. Do they look well or unwell? • Vital signs (if acutely unwell or infection suspected) • High or low body mass index. Are they cachectic? • Are they jaundiced or pale? • Comment on any relevant findings e.g. food/drink, nil by mouth (NBM) sign, vomit bowls, IV infusions, nasogastric tubes, surgical drains, catheter.
Hands and nails	<ul style="list-style-type: none"> • Look for <i>clubbing</i>, <i>leukonychia</i>, <i>koilonychia</i>, <i>palmar erythema</i>, and <i>tar staining</i>. • Feel for <i>Dupuytren’s contracture</i>. • Check pulse. • Count respiratory rate—breaths in 15 seconds x4. Normal is 12-15 at rest (15-20 in some patients e.g. anxiety). • <i>Hepatic flap</i> (asterixis): identical to hypercapnic flap. Ask the patient to hold their arms out in front of them with their hands dorsiflexed at the wrist (ask patient to “cock their wrists back”). Hold for at least 15 seconds. Look for a coarse flapping tremor. Seen in encephalopathy due to liver failure.
Arms	<p>Look for:</p> <p><i>Bruising</i> – can be due to a coagulation disorder due to liver failure</p> <p><i>Scratch marks</i> (excoriations) – suggests itch (pruritus) which may be due to jaundice (early sign)</p> <p><i>Track marks</i> – scars due to intravenous drug use (risk factor for hepatitis B & C)</p>
Neck	<p>Examine for cervical and supraclavicular <i>lymph nodes</i> (stand behind the patient).</p> <p><i>Virchow’s node</i> – left sided supraclavicular lymph node which, if enlarged, suggests gastric malignancy.</p>
Face/Mouth	<p>Eyes:</p> <p><i>Jaundice</i> – ask patient to look down and retract upper eyelid to expose the sclera. Is there a yellow discolouration of the sclera (scleral icterus)?</p> <p><i>Conjunctival pallor</i> – anaemia</p> <p><i>Kayser-Fleischer rings</i> – copper deposits in the iris seen in Wilson’s disease (best seen with a slit lamp)</p>

	<p><i>Xanthelasma</i> – raised yellow lesions caused by a build-up of lipids beneath the skin (hypercholesterolaemia)</p> <p>Inspect the mouth, throat and tongue:</p> <p><i>Ulcers</i> – seen in Crohn’s and IBD</p> <p><i>Angular stomatitis</i> – painful cracks at the corners of the mouth seen in thiamine, B12 and iron deficiencies</p> <p><i>Glossitis</i> – red, swollen tongue seen in iron, B12 and folate deficiencies</p>
EXAMINATION SEQUENCE	
Inspection	<p>Expose the chest. Look for:</p> <p><i>Spider naevi</i> (>5 is abnormal)</p> <p><i>Gynaecomastia</i> – excessive development of breast tissue in males. Causes: alcoholic liver disease, drugs.</p> <p><i>Loss of chest hair</i> in men (chronic liver disease)</p> <p>Cover the chest as appropriate.</p> <p>Ask patient: “are you comfortable lying flat?”.</p> <p>If yes, lay patient flat with their head on a single pillow.</p> <p>If no, lay them as flat as possible whilst maintaining patient comfort.</p> <p>The patient’s arms should be at their sides. This helps to relax the abdominal wall.</p> <p>Expose the abdomen from the bottom of the sternum to the symphysis pubis. Look for:</p> <p><i>Distension</i>: consider the 5 F’s (fat, fluid, flatus, faeces, foetus)</p> <p><i>Scars</i>: recent scars will be pink and vascular, old scars are white and may be indurated. Look carefully for small laparoscopic scars (including infra-umbilical).</p> <p><i>Visible veins</i>: abnormally prominent veins suggest portal hypertension or vena cava obstruction. <i>Caput medusae</i>: veins radiating out from the umbilicus.</p> <p><i>Stomas</i>:</p> <p>Where is it located on the abdomen?</p> <p>Can you see any exposed mucosa? What does it look like?</p> <p>Is there a bag? What’s in the bag? Any blood, pus, mucus?</p> <p>A stoma may be formed from the large bowel, small bowel or renal tract.</p> <p><i>Striae</i>: pink or white stretch marks. Caused by weight gain or rapid weight loss. Pink/purple in Cushing’s syndrome.</p>
Palpation	<p>Squat by the side of the bed (or raise couch up). You should look at the patient’s face for signs of pain whilst palpating the abdomen.</p> <p>“Do you have any pain in your abdomen?”. If yes, “can you show me where?”.</p> <p>“Please let me know if I cause you any discomfort”</p> <p>Light palpation:</p> <p>Starting away from any site of pain, use one hand to lightly palpate all 9 regions of the abdomen. When palpating, keep your whole hand in contact</p>

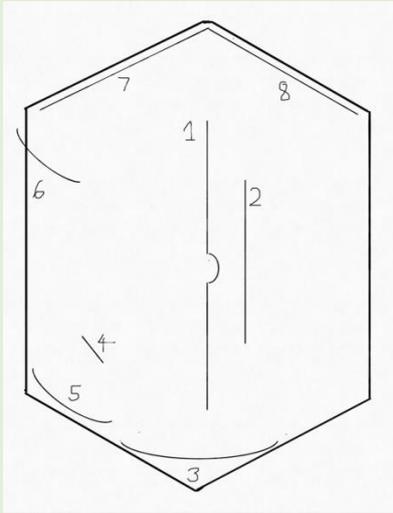
	<p>with the abdomen and use your fingers to palpate (flexing at the metacarpophalangeal joints). Note the site of any tenderness.</p> <p>Deep palpation: Repeat as above with deeper palpation (more pressure) taking care over areas of tenderness. Feel for masses or structural abnormalities. If you feel a lump, try to describe its exact location, size, shape, surface, consistency, mobility, movement with respiration, tenderness and whether or not it is pulsatile.</p> <p>Palpating the abdominal organs: Feel for the <i>liver</i> (start at the RIF, move up to the right hypochondrium) and <i>spleen</i> (start at the RIF, move up to the left hypochondrium). Move your hand up when the patient breathes out and press into the abdomen when the patient breathes in. Ballot the <i>kidneys</i> at the flanks. Feel for an <i>abdominal aortic aneurysm</i> (AAA) just above the umbilicus.</p>
Percussion	<p>Produces a hollow resonance, it produces a dull thud without resonance over fluid and solid masses.</p> <p>Press the middle finger of your non-dominant hand firmly onto the abdomen. Tap it with the flexed index or middle finger of your dominant hand.</p> <p>Percussing for the liver: start at the right iliac fossa (RIF) and percuss up to the right costal margin listening for areas of dullness. Then percuss down the chest from the 5th intercostal space mid-clavicular line listening for dullness indicating the upper border of the liver. Normal liver extends from the 5th rib to the costal margin.</p> <p>Percuss for the spleen from the RIF to the left costal margin.</p> <p>Percuss for the bladder from the umbilicus down to the symphysis pubis.</p>
Auscultation	<p>Listen for bowel sounds with the diaphragm of the stethoscope to the right of the umbilicus. Listens for up to 2 minutes if needed.</p> <p>Listen 2-3 cm above and lateral to the umbilicus for bruits from renal artery stenosis.</p>
Lower limb	<p>Check for pitting oedema, bruising and erythema nodosum.</p> <p>Examine hernia orifices, inguinal nodes and external genitalia as appropriate.</p>
Investigations	<p>Perform a digital rectal examination if indicated</p> <p>Urine dip (+ β HCG if patient is female)</p>
Closing	<p>Cover patient/help them dress or get off couch if required, thank patient.</p> <p>Explain any findings to patient. Wash hands.</p>

Further notes:	
Clubbing	<p>There is a loss of the angle between the nail and the nail bed.</p> <p>Abdominal causes of clubbing include the 4 Cs:</p> <ul style="list-style-type: none"> - Cirrhosis - Crohn's disease

	<ul style="list-style-type: none"> - Ulcerative Colitis - Coeliac disease
<p>Leukonychia</p>  <p>DermNetNZ.org</p>	<p>White nails.</p> <p>Cause: hypoalbuminaemia (e.g. protein calorie malnutrition, malabsorption, hepatic disease, nephritic/nephrotic syndromes).</p>
<p>Koilonychia</p> 	<p>Spoon-shaped nails (concave).</p> <p>Cause: iron deficiency anaemia.</p>
<p>Palmar erythema</p>  <p>DermNetNZ.org</p>	<p>Blotchy reddening of the palms.</p> <p>Causes: can be a normal finding, chronic liver disease, pregnancy.</p>
<p>Dupuytren's contracture</p>	<p>This is a localised formation of scar tissue beneath the skin of the palm of</p> <p>the hand. Thickening and fibrous contraction of the palmar fascia. May progress from a palpable irregular thickening of the fascia to a fixed flexion deformity of the 5th finger (may work across to the 3rd or 2nd fingers).</p>

	<p>Causes: alcoholic liver disease, familial.</p> <p>Associations:</p> <ul style="list-style-type: none"> • Increasing age • Family history • Smoking • Alcohol excess and cirrhosis • Diabetes, trauma including the use of pneumatic drills
<p>Jaundice</p> 	<p>Due to raised bilirubin levels. Seen as a yellow discoloration in the skin – maybe most easily seen in the sclera (scleral icterus).</p>
<p>Kayser-Fleischer rings</p> 	<p>Copper deposits in the iris seen in Wilson's disease (best seen with a slit lamp).</p>
<p>Angular stomatitis/cheilitis</p> 	<p>Inflammation of the corners of the mouth.</p> <p>Causes include thiamine, B12 and iron deficiencies</p>
<p>Spider naevi</p> 	<p>A central red area with engorged capillaries spreading out from it in a 'spidery' manner. It will completely disappear with pressure applied to the centre. Found in the superior vena cava (SVC) distribution. >5 is abnormal, causes include chronic liver disease and oestrogen excess.</p>

Abdominal scars



1. **Midline Laparotomy:** exploratory, various abdominal surgery (hemicolecotomy, AAA repair)
2. **Right Paramedian:** spleen, kidney, adrenal surgery
3. **Pfannenstiel:** Caesarian section, hysterectomy, cystectomy, bladder, prostate surgery
4. **Gridiron/McBurney's incision:** Appendicectomy
5. **Hockey stick:** Renal transplant
6. **Loin incision:** Nephrectomy, specialist renal surgery
7. **Right subcostal / Kocher's:** open cholecystectomy, liver resection, biliary surgery
8. **Left subcostal / reverse Kocher's:** open splenectomy

Caput medusa



Veins radiating out from the umbilicus. Abnormally prominent veins suggest portal hypertension or vena cava obstruction.

Striae



Pink or white stretch marks.

Caused by weight gain or rapid weight loss. Pink/purple in Cushing's syndrome.

Stomas

Colostomy: usually seen in left iliac fossa (LIF), flush to the skin. Bag may contain semi-solid to formed brown stool.

Ileostomy: usually in the right iliac fossa (RIF), you may see a 'spout' of bowel mucosa extending from the abdominal wall. Bag may contain semi-formed and liquid stool – may be green.

Urostomy: usually in the right iliac fossa. Bag will contain urine.

	Nephrostomy: usually at the flank (usually temporary). Bag will contain urine.
Abdominal tenderness	<p>Guarding:</p> <p><i>Voluntary guarding</i> is the voluntary contraction of the abdominal muscles in response to pain.</p> <p><i>Involuntary guarding</i> is the reflex contraction of the abdominal muscles when there is inflammation of the parietal peritoneum (generalised peritonitis). The patient will lie very still and breathing will become more thoracic.</p> <p>Rebound tenderness: pain is worse when you rapidly remove your hand after deep palpation.</p> <p>Murphy's sign: using the tips of your fingers, palpate just below the right hypochondrium. Ask the patient to breathe deeply. Move your fingers upwards when the patient breathes out. Breathing in may bring an inflamed gallbladder into contact with your fingers. The patient will halt their breath in due to the pain. This indicates cholecystitis (Murphy's sign is positive).</p>

Dipping a urine sample with a multistix test detects several substances in the urine including glucose, proteins, red cells, ketones and by products of bacteria such as nitrites. It is used to help investigate for urinary tract infection, and test for and monitor diabetes, kidney disease, high blood pressure, liver disease and other conditions such as metabolic disorders. It is also used for monitoring in pregnancy.



An explanation to patients about what a urine dipstick test is can be found here:

<https://patient.info/health/urine-dipstick-test> and how to collect a mid-stream specimen of urine here: <https://patient.info/health/midstream-specimen-of-urine-msu>

The following table is taken from the Consultation and Procedural skills (CAPS) logbook for students from Year 3 onwards. It gives a clear run through of how to do a urinalysis.

<https://www.ole.bris.ac.uk/bbcswebdav/institution/Faculty%20of%20Health%20Sciences/MB%20ChB%20Medicine/MB16%20Store/assessments/CAPS%20Logbook.pdf>

Performance Criteria: The student will:
1. Introduce yourself, explain procedure to patient and obtain consent
2. Prepare equipment
3. Check that reagent strip has not passed expiry date.
4. Ask patient when urine sample was passed.
5. Put gloves on
6. Observe colour and opacity
7. Remove reagent strip from bottle, replace lid immediately and check that test pads are the correct colour at the start.
8. Dip the reagent strip into the sample of urine, ensuring that all the test pads are covered.
9. Remove reagent strip immediately, as you do so drag the back of the test strip against the sample pot to remove excess urine.
10. Replace lid on urine sample bottle.
11. Hold the stick so the urine does not run into individual test squares, wait the appropriate time before reading each result.
12. Use stopwatch to record time accurately and hold colour key next to the reagent strip*.
13. Decide if urine sample needs to be sent to laboratory or if the patient needs to do a MSU and then dispose of reagent strip and gloves. Dispose of urine in sluice or return to patient.
14. Wash hands
15. Explain results to patient and decide what further action is necessary.
16. Record results accurately in notes.

Discussing stool consistency with patients can be helped by using the Bristol stool chart see here: https://www.bladderandbowel.org/wp-content/uploads/2017/05/BBC002_Bristol-Stool-Chart-Jan-2016.pdf

Case-Based Learning Cases in Abdominal symptoms.

A 75-year-old woman complains of abdominal pain. It started suddenly 24 hours ago. It's a dull, constant aching pain in the centre of her abdomen that doesn't radiate anywhere. It is not helped by oral paracetamol. She has vomited once and upon inspection it looks like altered food without any coffee ground appearance. She denies passing any stool with a black tarry appearance. She stopped smoking 15 years ago after a 30-year pack history.

She has a history of stable angina and is currently taking 75 mgs of aspirin daily, glyceryl trinitrate spray when required. She had a hysterectomy 40 years ago for menorrhagia. She lives alone and can carry out all activities of daily living without assistance. She enjoys a small glass of wine or two when socialising with friends.

On arrival in the surgical admissions unit a rapid A to E assessment is performed:

Airway	Clear, spontaneous ventilation
Breathing	Vesicular breath sounds SaO ₂ 96% FiO ₂ 0.21 Bilateral air entry Breathing rate 22 breaths per minute, taking deep breaths
Circulation	Capillary refill less than 2s Pulse irregular at 75 beats per minute Blood pressure 118/72 mmHg
Disability	Alert Pupils equal in size and responsive to light and accommodation
Exposure	Temperature 36.5 °C No rash
Blood glucose	6 mmol/l

Inspection of her abdomen revealed the hysterectomy scar. Palpation elicited mild tenderness of the umbilical area without guarding. No masses or organomegaly were palpable. There was no percussion tenderness. On auscultation there were occasional bowel sounds. There were no abnormalities of the external hernial orifices and a digital rectal (PR) examination revealed soft, light brown stool.

An erect chest radiograph (CXR) showed no evidence of lower lobe pneumonia nor any free subdiaphragmatic gas. An abdominal radiograph (AXR) did not reveal any dilated bowel loops or fluid levels.

The junior doctor concluded that the patient did not have an acute abdomen but should be admitted and monitored closely for developing signs of peritonitis. Intravenous access was obtained using a venflon™ (see appendix 1) and blood samples were sent for laboratory analysis. Aliquots of intravenous morphine were given for analgesia, ondansetron for nausea and one litre of crystalloid over three hours. She was placed nil by mouth (NBM) in case of requiring a general anaesthetic and endotracheal intubation. FBC showed a neutrophilia and raised CRP and slightly elevated lipase. Over the next hour her condition deteriorated her temperature rose to 38°C, her pulse rose to 120 beats per minute and her blood pressure dropped to 88/40 mmHg. An arterial blood gas sample was obtained (see appendix 2) and analysed:

Arterial blood gas (ABG)		
pH	7.15	7.35-7.45
PaO ₂	11.8	11-13 kPa
PaCO ₂	3.33	4.7-6.0 kPa
Bicarbonate	8	24-30 mmol/l
Lactate	6	0.6-2.4 mmol/l

The patient was stabilised with further intravenous fluid replacement and antibiotics (coamoxiclav). She was taken of the operating theatre for an emergency laparotomy. A large part of her small bowel was found to be infarcted due to an embolism in her superior mesenteric artery. During her hospital stay she lost significant muscle mass. Her rehabilitation included physiotherapy and occupational therapy. She was discharged home with a care-package of carers visiting twice daily to help her wash, dress and prepare breakfast and to help her get ready for bed at night. A stairlift was fitted to allow her to use the upstairs toilet during the day.

Questions for facilitators:

What would a coffee-ground appearance of vomit suggest?

What would a black tarry appearance of stool suggest?

What is a smoking pack year?

Does aspirin cause any side effects involving the stomach/duodenum?

What is menorrhagia?

What is a hysterectomy?

In the primary survey what might the increased respiratory rate with deep breaths imply?

What does the irregular pulse imply? Does it place her at higher risk of any conditions?

Which part of the gut give rise to a dull, poorly localised (visceral) pain in the umbilical region? How is the sensation transmitted from the gut to the brain?

How would the pain be different if a neighbouring part of the parietal peritoneum (somatic pain) was inflamed?

What does organomegaly mean? What are the typical abdominal examination findings of (1) an enlarged liver (hepatomegaly), (2) spleen (splenomegaly), (3) kidney and (4) bladder?

Where are the major external hernial orifices located? What is a hernia? What are the potential complications of a hernia containing loops of bowel?

Can a lower lobe pneumonia cause abdominal pain?

What does free (i.e. outside of the gut) subdiaphragmatic gas on an abdominal radiograph indicate?

What do dilated loops imply?

What is an acute abdomen?

What is peritonitis? What are the signs of peritonitis?

Why is it important to keep a patient nil by mouth if they may require a general anaesthetic and intubation?

Her deteriorating condition indicates shock. What are the different types of shock which are plausible in this case?

What is a laparotomy?

What are the reasons for her loss of muscle bulk during her stay in hospital?

What are the roles of physiotherapists and occupational therapists in rehabilitation?

Lectures and practicals:

- Causes and investigations of upper and lower GI bleeding e.g. Mallory-Weiss tear, Peptic ulcer, Varices, Diverticulitis, Inflammatory bowel disease, Haemorrhoids, Anal fissure, Large bowel malignancy. Definite haematemesis and melaena. Appreciate the importance of investigating for possible occult GI tract bleeding in cases of iron deficiency anaemia.

- The normal function of the liver
- The clinical features of acute and chronic liver disease including cirrhosis. The common causes of liver disease such as medication, alcohol, viral infection, haemochromatosis, cancer secondaries and autoimmune disease. The relevant initial clinical assessment and investigations for liver dysfunction.
- Lecture 4: Pathophysiology of vomiting. Describe the causes and pathophysiology of chronic vomiting, including bulimia and pyloric stenosis. Describe the acute and chronic acid-base disturbances associated with vomiting. Pharmacological management of vomiting including supportive management including IV fluids and NG tube. The significance of faeculent vomiting.
- Symptoms, signs and investigation of GI tract malignancy
- Symptoms, signs and investigations of altered bowel habit
- Pain (referred, colicky and peritonitic)
- Infection 1: Symptoms and investigations of bacterial infections in the GIT
- Abdominal pain in special circumstances.
- Infection 2: Viral infections of the GIT; viral gastroenteritis
- Infection 3: Viral infections of the GIT; viral hepatitis
- Functional bowel disorders
- Guest lecture: MDT session on obesity

Cross-disciplinary Workshop 1 – Clinical reasoning session: Nutritional challenges

Cross-Disciplinary Workshop 2 – Clinical reasoning session: Diagnosis of liver disease

Applied Anatomy and Imaging Practical; Abdominal symptoms

Practical class: Oral rehydration therapy practical