Performing a digital rectal examination: indications and examination

Introduction

The digital rectal examination is an important and frequent component of the examination process, performed by every grade of doctor at various stages in their careers. However, foundation and core trainees vary in their training, confidence and experience in performing a rectal examination. Some trainees are also unsure of the rationale for performing a rectal examination – when asked, the main reasons given are to exclude a rectal or prostate cancer. However, digital rectal examination can provide a wealth of information, clinch the diagnosis and guide subsequent management.

Given its importance and invasiveness as a clinical examination tool, this article offers a simple structured guide to performing an effective and safe rectal examination. This first part discusses the main indications and provides a structured approach to performing the examination. The second part (https://doi.org/10.12968/hmed.2018.79.2.C22) discusses the accuracy, main considerations and interpretation of the digital rectal examination.

Clinical anatomy

Digital rectal examination affords access to several important structures (*Figure 1*). In both men and women, the anus and lower rectum can be palpated. In men, the posterior aspect of the prostate can be palpated through the anterior rectal wall and in women, the cervix and posterior surface of the uterus can also be felt.

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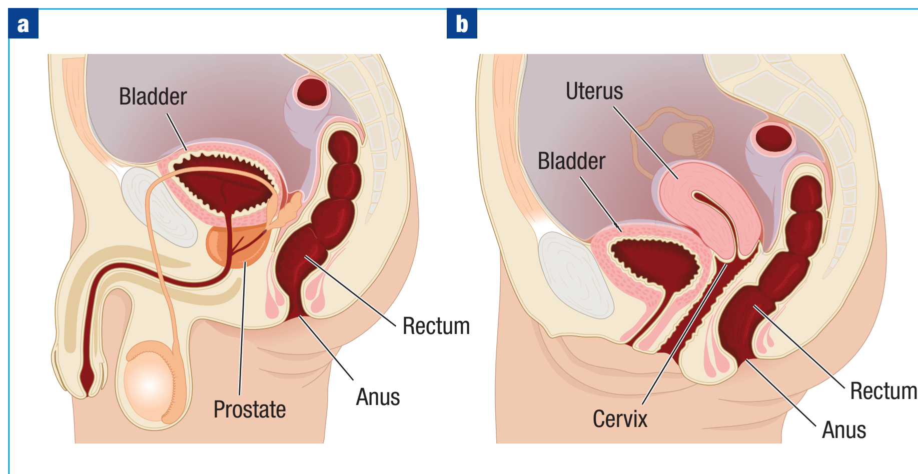
Figure 1. Sagittal section of (a) male and (b) female pelvis.



General indications

Digital rectal examination can form part of a gastrointestinal, urological, gynaecological or neurological examination.

Symptoms and clinical scenarios which may necessitate a digital rectal examination include:

- Rectal bleeding (haemorrhoids, fissures, inflammatory bowel disease, neoplasia)
- Change of bowel habit (neoplasia, constipation, inflammatory bowel disease)
- Patients presenting with iron deficiency anaemia
- Anal lump (haemorrhoids, rectal prolapse, neoplasia)
- Urinary symptoms in males: dribbling, hesitancy, nocturia (prostatic disease – benign or malignant)
- Bladder or bowel dysfunction (neurological disease)
- Gynaecological disease: tumour infiltration in pouch of Douglas or rectovaginal septum
- As part of the assessment of a trauma patient.

Examination and technique

The authors use the acronym CSPINE to describe the important components of the rectal examination (*Table 1*).

C: Consent, chaperone and conditions

Of all the components of digital rectal examination, appropriate consent, preparation and anticipation are the most important considerations.

Consent

Inform the patient early on of the need to perform digital rectal examination: e.g. 'As part of the examination, I need to examine your back passage. Would that be okay?'

Evidence of verbal consent for a digital rectal examination should be documented in the patient's notes.

Table 1. An approach to the rectal examination: CSPINE
C: Consent, chaperone and conditions
S: Skin
P: Palpation
I: Internal organs
N: Neoplasia
E: End of examination care

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Respect the decision of the patient to decline digital rectal examination – this should also be documented. The patient may choose to volunteer a reason for declining the examination, but this should not be aggressively pursued. Reasons may include embarrassment, discomfort or the fear of discovering a cancer. It may be helpful to find out if there is something that can be done to make the examination more acceptable for the patient: 'I respect your decision to not have the examination. Is there anything we can do to make the examination easier for you?'

Offer a concise description of what the patient is likely to expect during the examination: 'It involves lying on your side, with your knees bent up to your abdomen. Then I will insert a gloved finger into your back passage for a few seconds. I will be using some gel to help me to do this, which may feel cold. Usually the examination does not hurt, but it may feel unusual or slightly uncomfortable for a few seconds.'

Offer reassurance to the patient that he/she is in control of the examination at all times: 'However, if you have any pain or want me to stop at any time, please let me know.'

Chaperone

The presence of a chaperone affords protection to both the patient and yourself. It also offers rapid assistance if required, and reassurance and support to the patient during this invasive examination. As with the consent process, the presence of the chaperone should be recorded in the patient notes with the name and grade of the chaperone.

The General Medical Council (2013) offers specific guidance regarding intimate examinations and the use of chaperones, otherwise known as an impartial observer (*Table 2*).

Table 2. General Medical Council guidance regarding use of chaperones
1. The patient should be offered the option of having a chaperone present. This applies whether or not the clinician is the same gender as the patient
2. A chaperone should usually be a health professional
3. A relative or friend of the patient is not an impartial observer and so would not be a suitable chaperone, but you should comply with a reasonable request to have such a person present as well as a chaperone
4. If either you or the patient does not want the examination to go ahead without a chaperone present, or if either of you is uncomfortable with the choice of chaperone, you may offer to delay the examination to a later date when a suitable chaperone will be available, as long as the delay would not adversely affect the patient's health
5. If you don't want to go ahead without a chaperone present but the patient has said no to having one, you must explain clearly why you want a chaperone present. Ultimately the patient's clinical needs must take precedence. You may wish to consider referring the patient to a colleague who would be willing to examine them without a chaperone, as long as a delay would not adversely affect the patient's health
6. You should record any discussion about chaperones and the outcome in the patient's medical record. If a chaperone is present, you should record that fact and make a note of their identity. If the patient does not want a chaperone, you should record that the offer was made and declined
From General Medical Council (2013)

Conditions

Figure 2 illustrates the main steps involved in the rectal examination.

Ensure you have all the necessary equipment with you, notably gloves, lubricant and tissues.

The examination should take place in a safe place in the unlikely event that a patient experiences a vasovagal syncope. Positioning the bed along a wall with the examiner standing on the other side ensures that the patient is unable to fall.

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Positioning is essential to facilitate appropriate access to anatomical structures. Ask the patient to lie on his/her left hand side with his/her knees drawn up to his/her chest. The position of the patient can also reveal important details: is the position causing him/her pain? If elderly, can the patient mobilize to the bed and adopt the correct position? If not, this may preclude further investigation such as colonoscopy.

Getting undressed for digital rectal examination may be awkward or embarrassing for the patient. The authors suggest leaving the room to allow the patient to undress and position him-/herself appropriately with a blanket covering the anus before re-entering the room a few minutes later.

S: Skin

Having washed your hands and put on your gloves, separate the buttocks and inspect the area around the anus.

Look for any pathological conditions such as external haemorrhoids, ulcers, abscesses, cellulitis, skin tags, skin changes, fissures, fistulas, rectal prolapse and lumps (rectal or anal carcinomas).

Are there any signs of previous surgery such as scar tissue or a seton in a fistula?

Is there any discharging pus?

P: Palpation

After inspecting the skin, lubricate your right index finger.

Inform the patient that you are about to start the procedure.

Place the non-examining hand on the patient's right pelvic bone to provide counter-traction.

Place your lubricated index finger on to the anus, pointing anteriorly and apply gentle pressure to the midline of the anus.

Slowly enter the anus as you maintain pressure. After a few seconds, the anal sphincter should relax, allowing the digit to be advanced further into the rectum. What do you hear from the patient? Is it painful? This may suggest the presence of an anal fissure.

As you advance, assess anal tone by asking the patient to squeeze on your finger. Anal tone can be lax or absent in neurological disease.

I: Internal organs and N: Neoplasia

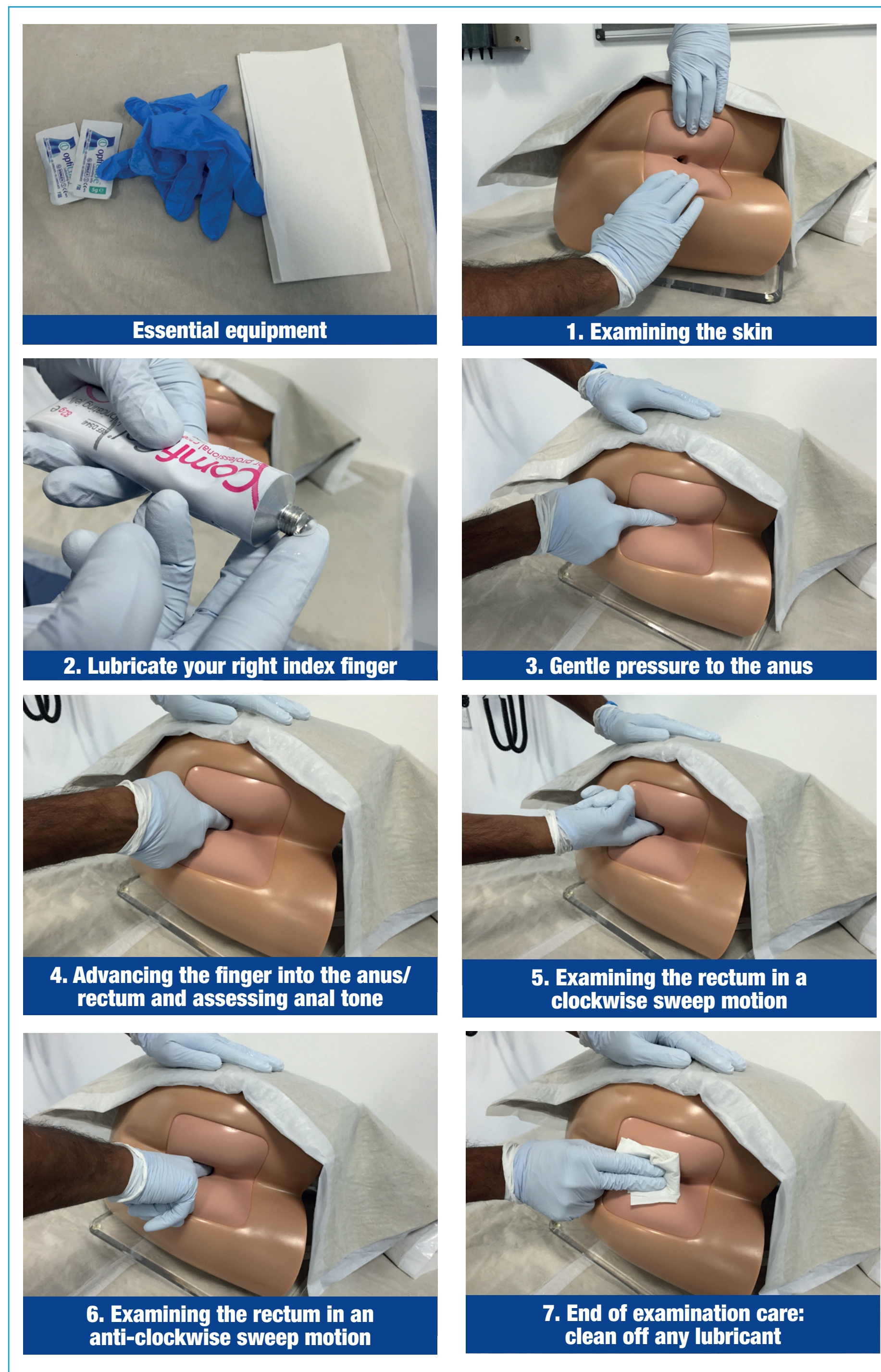
Rectum

Systemically examine each part of the rectum: sweep your finger in a clockwise and then anti-clockwise manner to assess the entire circumference of the rectum.

Feel for any masses within the rectal wall (noting the approximate size, consistency and location – anterior, posterior, right or left lateral walls), impacted faeces or internal haemorrhoids.

If you feel a mass, note the approximate distance from the anal verge.

Figure 2. Steps in the digital rectal examination.



Prostate

Assess the size and consistency of the prostate gland: begin at the apex and progress to the base, noting the central sulcus and lateral lobes of the gland. The normal prostate gland is similar to the consistency of the thenar eminence when the thumb and little finger are opposed. Prostate cancer usually feels harder, often like a rock.

Prostatic tenderness suggests acute prostatitis. Vigorous palpation of the prostate should be avoided to prevent the risk of disseminating infection into the bloodstream.

E: End of examination care

Remove your finger and examine the glove for any evidence of blood or mucus. If blood, is it fresh or dark?

Clean off any lubricant around the anus.

Provide the patient with a generous supply of tissues, and some privacy for cleaning up and getting dressed.

Explain the examination findings to the patient.

Gynaecological assessment

A rectal examination can be combined with a digital vaginal examination if indicated.

While the index finger remains in the vagina, the middle finger is slowly inserted into the anus. The patient is asked to bear down and actively push the finger out. This has the effect of relaxing the anal sphincters, making the insertion more comfortable. This allows assessment of a number of structures:

- Pouch of Douglas (recto-uterine pouch): presence of a tumour or prolapsed ovaries
- Uterosacral ligaments: infiltration with invasive carcinoma, nodular with endometriosis
- Parametrium (fibrous tissue separating the supravaginal portion of the cervix from the bladder): infiltration with invasive cervical carcinoma
- Rectovaginal septum.

Occasionally, a rectal examination alone may be performed instead of a rectovaginal examination in patients with invasive cervical carcinoma or in cases where an abnormality was identified by rectovaginal examination (Kruger and Botha, 2007).

Caution and contraindications

'You should never omit the rectal examination from your routine examination.' (Browse, 1991).

'If you don't put your finger in it, you risk putting your foot in it' (Talley and O'Connor, 1992).

Such phases are deeply embedded in medical teaching and give the impression that a rectal examination is a compulsory component of clinical assessment. This has been replaced by a more considered, selective approach. Certainly, in infants and children (discussed in greater detail in the second part of this article), digital rectal examination should only be performed with clear indications and by experienced clinicians.

A history of an anal fissure (typically searing severe pain on defaecation, often described as a sensation akin to passing razor blades) is a contradiction to this procedure in inexperienced hands. If there is any suggestion of this from the clinical history, the patient should be referred to a colorectal specialist.

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Digital rectal examination should be avoided in patients with suspected prostatitis or prostatic abscesses, as illustrated by a reported 67% bacteraemia rate following the massage of infected prostates (Tandberg and Reed, 1978).

Conclusions

The digital rectal examination is a common component of the examination process, performed by all grades of doctor, so a sound working knowledge of the indications and technique is essential. General Medical Council guidance regarding the use of chaperones should always be considered. **BJHM**

Conflict of interest: none.

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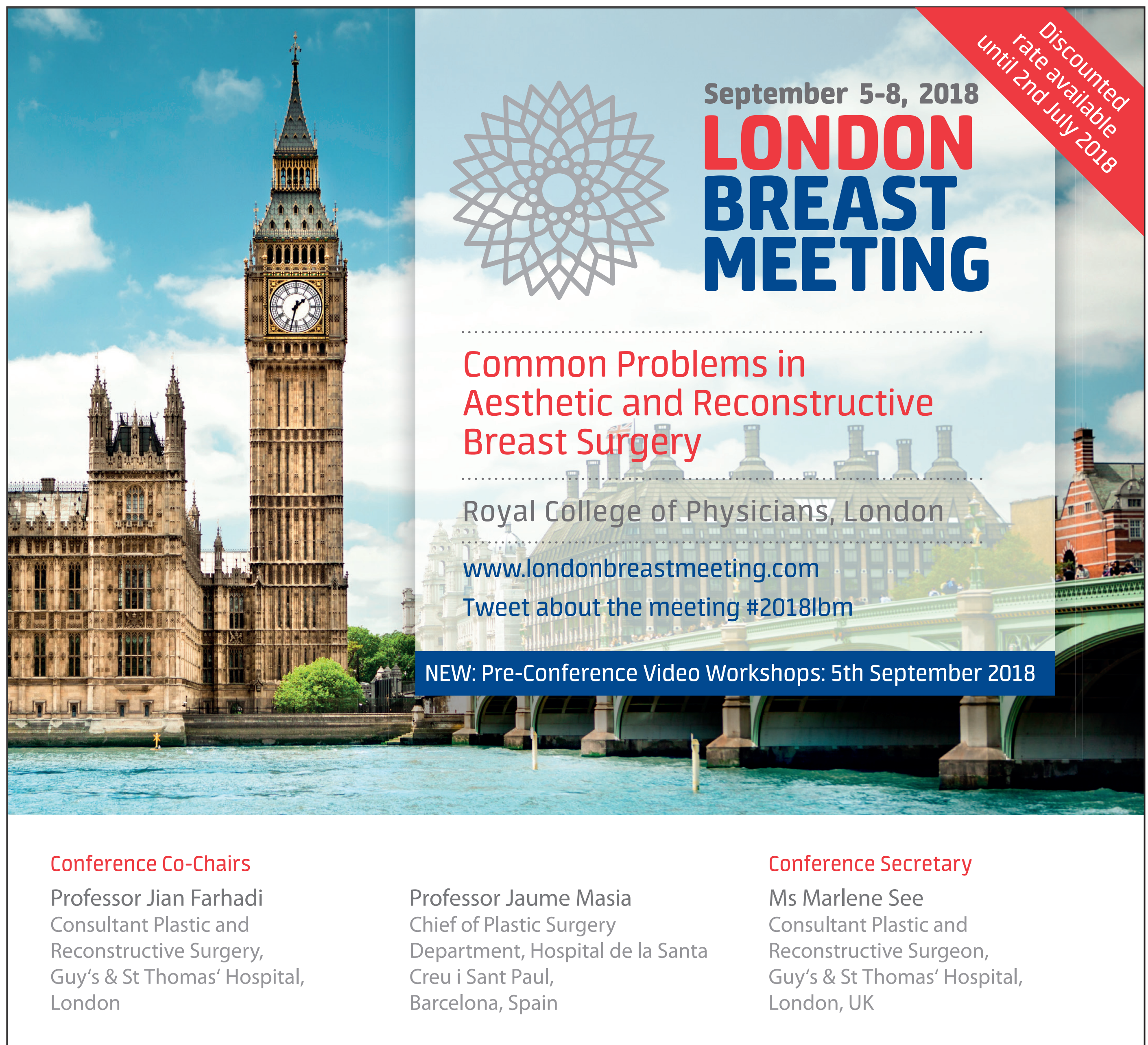
KEY POINTS

- The digital rectal examination affords assessment of a number of important structures: anus, rectum, prostate gland and uterus.
- Indications include rectal bleeding, change of bowel habit, mass or lump, and urinary symptoms in a man.
- Appropriate and documented consent are essential.
- A chaperone should be offered and any discussion regarding a chaperone should be documented in the patient's notes.



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