The Digital Rectal Examination – more than assessment of the prostate gland

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ABSTRACT

The digital rectal examination (DRE) is a fundamental part of the abdominal examination. Its technique is explained and taught well in medical schools and its importance is highlighted. I recently asked my house officer to perform one and was surprised by their lack of understanding as to what they were looking for and the reasons for performing it. It concerned me that perhaps there were other junior colleagues who did not fully appreciate the reasoning and were therefore not obtaining adequate or appropriate consent prior to the examination. This article sets out a framework for performing a DRE and the implications of the common findings. I hope that this article will subsequently be used by future junior doctors to obtain informed consent according to Medical Council guidelines.

INTRODUCTION

You complete a beautiful abdominal examination and get ready to present to your educational supervisor. As you get to the end of the presentation you remember to tell him that you would always perform a digital rectal examination (DRE).[1]

Your supervisor congratulates you on remembering an extremely important feature of the exam. The conversation proceeds to asking why it is important.

You manage to stutter out a couple of answers like assessing the prostate gland and whether there is hard stool in the rectum or not.

You receive congratulations again and your beleaguered brain lets out a sigh. Your consultant then asks you 'what else?'

Indications

Junior doctors are required to give patients information on the need for aspects of examination, investigation and treatment.[2] The DRE is important in the assessment of the anorectal region, the prostate gland in men, the cervix in women, as well as manual bowel evacuation.[2] Every patient should have a digital rectal examination except in certain circumstances, for example in children, those who do not give consent, conditions such as acute epididymitis, and in those patients where a rectal examination is not going to affect your management[3-5]; particularly if the patient is likely to be referred to a specialist where a repeated examination will take place.[6]

The key is classification

Medicine is all about classification and applies both to academic and clinical skills. Academic medicine has its own classifications depending on the particular topic one looks at. Clinical skills have traditionally been classified into Inspection, Palpation, Percussion and Auscultation. These four aspects are based upon the senses which all doctors possess.

Often in clinical practice the sense of touch is the only one that is used when performing a DRE. This article aims to describe the DRE in terms of the five senses (sight, smell, touch, hearing and taste) and the stage of the examination (at the beginning, middle, and end).

How to perform a digital rectal examination

This article describes one way of performing DRE practised in our department.[7] Stress must be given to the importance of informed consent along with a chaperone.

Consent

Informed consent is important; merely explaining that you need to do the procedure as part of a complete examination is inadequate. Imagine you are the patient and someone who you do not know wants to place a finger in your anorectal canal. I know that if I was in hospital, I would want a good reason for it. Furthermore as a clinician you should want a pretty good reason for doing it yourself.

One should also be aware that there are a number of reasons that patients refuse an examination ranging from fear of finding a cancer to discomfort and embarrassment.[8] These concerns should be addressed as appropriate with adequate explanation and offering someone of the same gender to carry out the procedure although this may not always be of concern to the patient.[9]

The findings outlined below are the commonest reasons for performing a DRE examination and should be used in attaining informed consent.

The Procedure

After appropriate consent and preparation, the patient is positioned on their left side with the knees and hips flexed so that the knees are pulled towards the chest (Fig 1). The buttocks should be close to the edge of the bed.

A gloved finger lubricated with KY jelly should be inserted into the anal canal and after completion the finger withdrawn. The patient's anus should be wiped afterwards and the patient thanked for their patience.

Figure 1. Positioning the patient in preparation for the examination.

Figure 2. Inserting the finger.

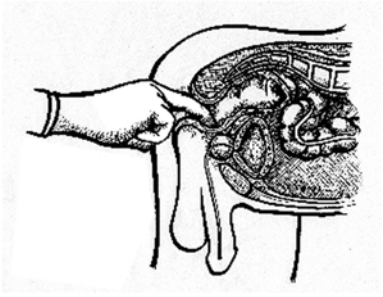

Figure 3. The anal canal and recum as a garden shed with five sides and an opening.

In The Beginning

The positioning of the patient will indicate a lot.

Is the condition causing them pain?

If the patient is elderly can they get into the correct position easily? If they struggle it may mean initiating the request for social services earlier rather than later.

On the left lateral side

What do you see?

- Is there discolouration around the anus?
  - Remember the bluish tinge around the anus for Crohns?
  - Is there erythema?
    - » Is there an underlying abscess?
    - » Is there persistent diarrhoea or incontinence causing irritation?
- Are there any prolapsed haemorrhoids?
- Is there a skin tag which may or may not be bleeding?
- Is there a swelling?
  - Is there pus, or is there pointing on the surface?
  - Is there an irregular swelling/mass suggestive of an anal cancer?
- Are there any signs of an operation?
  - Scar tissue
  - Discharging pus (do they have a fistula?)
  - Do they have a Seton in the fistula?

Inserting the finger

As you place your finger at the edge of the anal opening, about to insert your finger in (Fig 2)

What do you hear from the patient?

- Is it painful?
  - Indicating an underlying collection or irritation eg diarrhoea
- Is it painless?
  - Is there a spinal cord lesion if they can not feel you?

What do you feel?

- Does the skin around the anus feel thickened and indurated
  - Indicative of an underlying collection of pus
  - Is it cellulitis?

As you insert your finger

What do you hear from the patient?

- Is it painful
  - Could there be an anal fissure?

When completely inserting your finger, the anal canal and rectum can be considered as a garden shed with 5 sides and an opening (Fig 3).

What do you feel and hear from the patient?

At the 3 o'clock surface

In a man:

What does the prostate feel like?

- Could it be enlarged due to benign prostatic hypertrophy?
- Could it be a prostate cancer if it feels irregular?

Is the prostate tender?

- Could he have acute prostatitis?

Is it flattened?

- Indicative of previous surgery
- Has he had a TURP?

In a woman:

Is the cervix tender?

- Is it pelvic inflammatory disease?

At the 12 o'clock surface

Are there any masses?

- Any hard mass is cancer until proven otherwise.

Is it tender?

- Could there be a pelvic collection?
- Could there be a low lying appendicitis?

At the 6 and 9 o'clock surfaces

Is it tender?

- Is there a collection?

Are there any masses?

The roof (of the shed)

Are there faeces?

- Can you break it up or is it completely impacted?

Removing the finger

What do you see?

- Stool
  - What colour is it?
    - » Do they have obstruction?
    - » Do they have jaundice and biliary disease?
  - What is the consistency?
    - » Are they just constipated?
    - » If loose and sloppy do they have an enteritis?
- Blood?
  - Fresh – Could there be an anal fissure or haemorrhoids?
  - Dark – Do they take iron?
  - Mixed with stool? Is there a pathology higher up like inflammatory bowel disease or diverticular disease?
  - Black – is there an upper GI bleed?
  - Mucous/ Slime
    - » Do they have a polyp secreting mucus?

What do you smell?

- Is it pungent and sweet?
  - Is there an upper GI bleed?

The above method uses four senses in a chronological way when performing a DRE. The omitted sense is taste, but since smell is a large constituent of taste, you should remember that the next time you smell a maleana you are experiencing the taste as well!

CONCLUSION

The above findings for each of the senses are not intended to be exhaustive, but highlight the questions and answers that can arise from using all your senses when performing a DRE. Combined with an adequate history it can clinch a diagnosis, avoiding unnecessary, expensive tests and investigations, or indeed leading to more appropriate investigations. Furthermore I hope the classification above provides some insight into exactly why a DRE is so important and may help in informed consent when performing one on a patient.

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