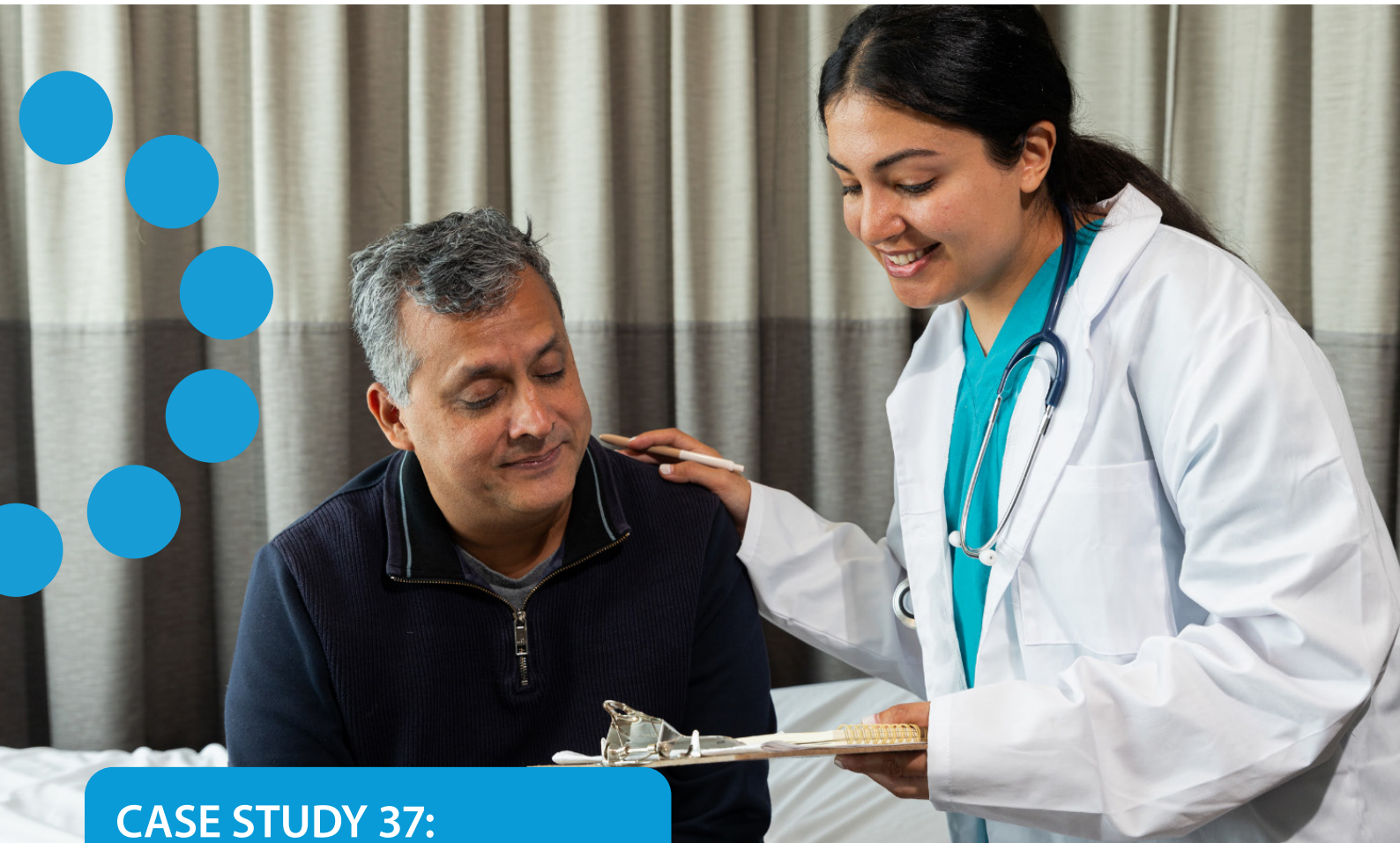




CASE STUDY 37:

Patient with “weak bladder”

Frank, 67, is active, fit and healthy for his age. He is proud that he has no identified chronic disease requiring regular medication and rarely has a need to “bother” (as he terms it) his GP.

However, from his early 50s he has noticed what he terms a “weak bladder”. He notes a weaker flow of urine, and an increasing need to get up in the night to pass water. When initiating, urination is also delayed at times, with some irritating dribbling after he has finished.

He had always put this slow deterioration down to ageing, and has not discussed it with his GP. But recently two friends at the golf club have had prostate cancer diagnosed after routine blood tests performed at health checks and this has seeded doubt.

He decides that he should see his GP to discuss testing for himself and whether his urinary symptoms are of concern in this context.

Frank, his wife and children have always used the same GP. However, she recently retired and her list has passed to a new young female doctor at their clinic.

Frank is very much outside his new GP’s usual patient demographic, comprising mostly young women and their children, but understands that Frank is describing classic lower urinary tract symptoms, and turns to HealthPathways Melbourne to refresh her memory for this symptom cluster in male patients.

CASE STUDY 37:

The background section of the [Lower Urinary Tract Symptoms \(LUTS\) in Men pathway](#) emphasises that although benign prostatic hyperplasia (BPH) or overactive bladder (or a combination of both) are the most common causes of LUTS, a wide variety of other conditions can cause the symptoms. These are listed at item seven in the assessment section.

7. Consider the most likely [underlying diagnosis](#). There may be more than one diagnosis, requiring simultaneous management.

Underlying diagnosis

List not exhaustive.

- [Benign prostatic hyperplasia \(BPH\)](#) – typically more obstructive (voiding) symptoms are present
- [Overactive bladder \(OAB\)](#) – typically more irritative (storage symptoms are present). Note that BPH and OAB often occur together, and it can be difficult to distinguish between them.
- [UTI](#)
- [Urethritis](#)
- Neurological cause e.g., cauda equina, [multiple sclerosis](#), [Parkinson's disease](#), or diabetic neuropathy causing [neurogenic bladder](#)
- [Chronic prostatitis](#)
- [Bladder stones \(vesical calculi\)](#)

The pathway assessment, in items two and seven, highlights the standard “voiding” and “storage” symptoms. These are characteristic of BPH and overactive bladder respectively. In Frank, the voiding symptoms are predominant, which leads the GP to suspect BPH is the most likely diagnosis. However, following advice on the page, she takes her patient systematically through history, examination and investigation directed at excluding other causes.

The pathway suggests the use of the International Prostate Symptom Score questionnaire and provides a link to it. Frank's score using that is nine, placing him in the “moderately symptomatic” category.

In assessment item six, the pathway identifies this as one of the indications for arranging a renal (kidneys, ureters and bladder) ultrasound scan (USS). In the context of expected BPH, this is primarily directed at measuring post-void residual bladder urine or hydronephrosis, which might influence the need for and urgency of surgical intervention.

- Arrange [ultrasound](#) kidneys, ureters, and bladder (KUB) if:
 - palpable bladder
 - overflow or nocturnal urinary incontinence
 - microscopic haematuria, and see [Haematuria in Adults](#) for circumstances in which CT-IVP may be required if this persists
 - lower urinary tract symptoms (LUTS) associated with abnormal renal function
 - suspected benign prostatic hyperplasia with moderate to severe symptoms
e.g. IPSS score ≥ 8

The GP decides to organise a referral for the USS. She will also arrange the other tests listed on the pathway including the prostatic specific antigen (PSA).

She also reads elsewhere in the pathway examination section that digital rectal examination (DRE) is required to assess for tender boggy of prostatitis or suspicious swellings that may be cancerous. A normal PSA does not negate the requirement.

4. Perform examination as indicated by history. Follow [recommended protocol](#) and consider a chaperone.

- Examine [external genitalia](#).
- Perform [digital rectal examination \(DRE\)](#).

Digital rectal examination (DRE)

Check perianal sensation and sphincter tone (consider cauda equina).

- Smooth, firm, symmetrical enlargement

CASE STUDY 37:

Unfortunately, she qualified as a GP after DRE (in combination with PSA) was found to be unsupportable in population screening to identify patients with prostate cancer. In addition, few of her patients are male so she very rarely encounters any with symptomatic prostate disease. She is only too aware, therefore, that her ability to assess prostates this way is insufficiently practised for her to be confident in her finding.

She takes the commendably professional approach of recognising her skill deficiency here and explains this to Frank. She asks him to make an appointment with a senior male colleague who has the expertise.

The male GP, she suggests, will also be able to do an external genitalia examination, which is recommended in the assessment part of the BPH pathway. Frank agrees to this, because he feels uncomfortable at the thought of a young female GP doing it. She suggests that her colleague will review the USS and other investigations and continue to care for the BPH if this is acceptable to Frank.

She then rings her colleague to check that he is agreeable to the arrangement. He is happy to see Frank to complete the assessment and initiate management.

Nevertheless, she takes a brief glance at the HealthPathways Melbourne [Benign Prostatic Hyperplasia \(BPH\) pathway](#). She tells Frank that her colleague may offer medication to help with the symptoms. She adds that there are some new conservative surgical options (listed in management point nine) for patients who do not find the medications tolerable.

Surgical options for benign prostatic hyperplasia (BPH)

- Resection
- Enucleation
- Vaporisation
- Alternative ablative techniques
- Non-ablative techniques

See Medicine Today – [Benign Prostatic Enlargement and Lower Urinary Tract Symptoms: An Update on Treatment](#) for brief descriptions of these

Over the next few days, the young GP finds the pathology and USS reports in her inbox.

The PSA and other investigations are normal for Frank's age. The USS shows moderate prostate enlargement and only modest post-void residual bladder urine. Checking the BPH pathway again, she notes that consideration of lifestyle changes and medication is appropriate for Frank at this stage. She concludes this can be left to her colleague to manage.

However, the USS also shows an incidental finding of a possibly complex renal cyst and advises further assessment.

Given this is a clinically separate issue to the BPH agenda she opts to sort this out herself rather than pass the matter over to her colleague.

She uses the HealthPathways Melbourne [Incidental Renal Lesion pathway](#) to determine that a triple phase CT scan is required to fully categorise this lesion under the Bosniak classification. The pathway dictates management based on the findings.

She telephones Frank to explain the situation and arrange the scan. When the results arrive, they confirm a Bosniak class 2 lesion that can be regarded as benign with no further follow up required.

Disclaimer: Images included in this case study are for communication purposes only and may not display the full content. Always refer to HealthPathways Melbourne for the latest and most accurate clinical information.