Urology in your clinic room

Simon van Rij, Urologist Auckland District Health board

Simon van Rij
0211053882
simon@vanrij.co.nz
svanrij@adhb.govt.nz

Disclosures

- Urologist at Auckland and Counties DHB
  - Grader of E-referrals
- Cancer control agency – genitourinary cancer working group
- Prostate Cancer Outcomes Registry - Steering committee
- Wife works as a General Practitioner
  - I remember her GPEP reg education program (FIFE)

Goals of today

- Develop confidence in identifying and managing common urological presentations in general practice
  - Recurrent UTI
  - Haematuria
  - Urinary Symptoms
  - Kidney Stones
  - Red Flags
  - PSA
  - Scrotal conditions
  - Erectile Dysfunction
  - Examination tips and techniques

Goals of today

- Information that is relevant:
  - Health Pathways
  - NZ guidelines
  - Your experiences

- Key learning objectives:
  - How to recognize and assess
  - How to manage in primary care
  - When to refer
  - Have fun

Goals of today

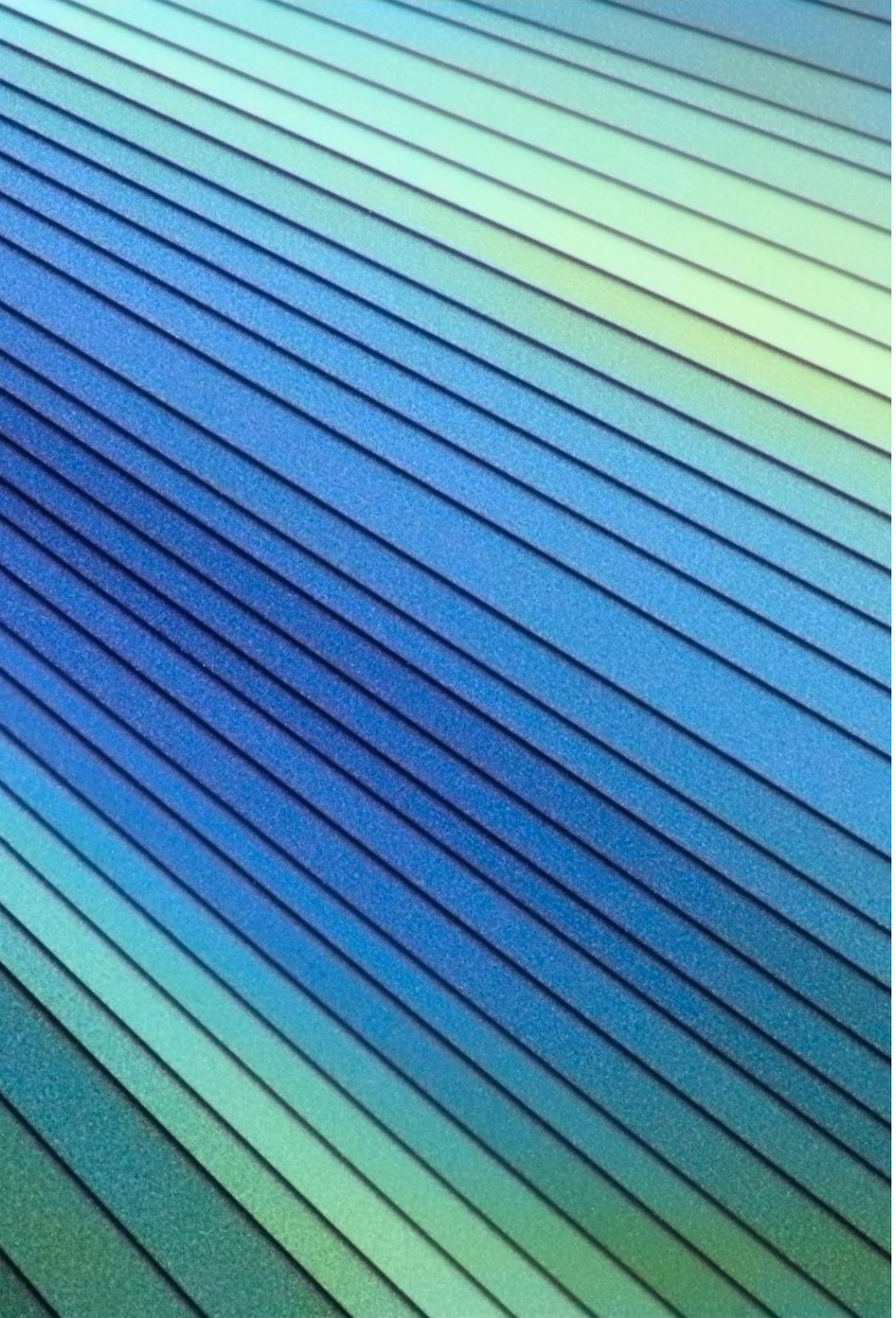
- Acknowledge inequalities of health in Auckland region
  - Maori
  - Pacific Islanders

- Promote interventions that reduce this

COMMON PROBLEMS….

- **Molly**
- 35yrs
- 2 children

- Presenting again with symptoms:
  - Frequency
  - Urgency
  - pain



Question time

- What tests (if any) would you request?
- What is your standard go to antibiotic and course?
- When would you consider prophylaxis and how would you do this?
- What would make you concerned for referral?

Recurrent UTI in females

- https://aucklandregion.communityhealthpathways.org/44019.htm

RECURRENT UTIS….

- **Defined as 3 + UTIs in 12months**
  - **Dx clinically with:**
    - Dysuria
    - Frequency
    - Heamaturia
    - Urgency
    - New onset incontinence

RECURRENT UTIS……

- **50% of females** will experience a UTI
- **25% of woman with a UTI will go on to develop recurrent UTIs**
- If the first UTI is an E.Coli = 44% chance of developing recurrent UTIs

RECURRENT UTIs……

- **MANAGEMENT:**
  - **No good evidence** for behavioral management
  - Fluids
  - Voiding after intercourse
  - Spermicides
  - Showers
  - Front to back
  - Void q4hourly

- **ALTERNATIVES…..**
  - **If ex/ smoker – test cytology/ Cx bladder**
  - **?TB exposure**
  - **BLADDER PAIN SYNDROME/ IC**
    - **Persistent pain**
    - **Relieved by voiding**
    - **All day + night**

Post menopausal

- Oestrogen cream

Prophylaxis

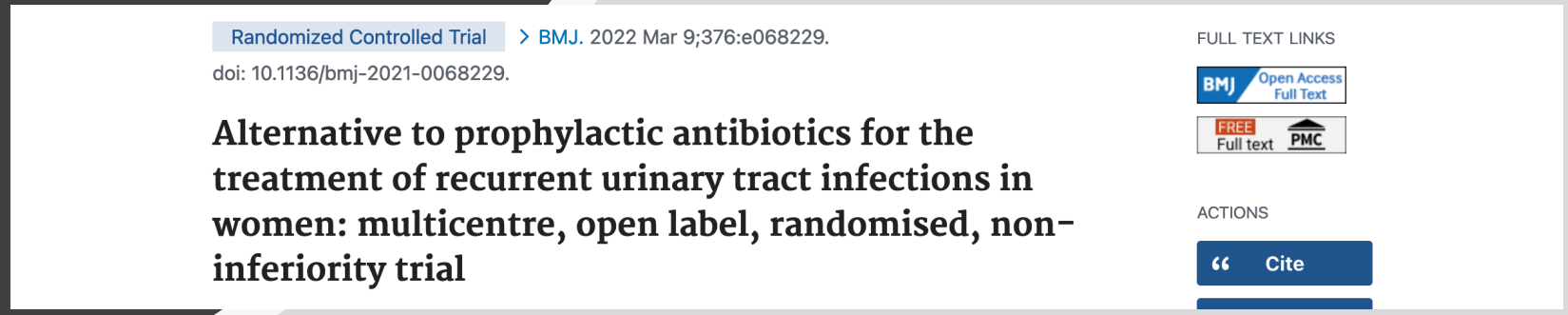
- Antibiotic versus non-antibioitic

Antibiotic Prophylaxis

- **MANAGEMENT:**
  - LOW DOSE CONTINOUS ABS
    - BETTER THAN NO ABS
    - REVERT TO PREVIOUS FREQUENCY ONCE DISCONTINUED
    - MINIMAL RISK OF SE
  - **POST COITAL ABS**
    - NO DIFFERENCE TO CONTINUOUS
    - TAKEN WITH 2HOURS

Non-antibiotic

- **HIPREX (take with vit C)**
  - Funded now
  - Antiseptic
  - RCT evidence
- **CRANBERRY:**
  - Proanthocyanidins - that prevent bacteria from sticking to the bladder wall and beginning the growth process.
  - Need at least 36 mg/g proanthocyanidins
- **D-Mannose:**
  - Regular use significantly reduced the risk of recurrent UTI
  - No different than in Nitrofurantoin group in recent study but higher compliance to therapy
  - 1 -2g/day
- **UROMUNE:**
  - SUBLINGUAL IMMUNOMODULATION
  - Section drug
  - 3 MONTHS OF X2 DAY SPRAY FOR 15+ PROTECTION
- **INSTALLATIONS**



RECURRENT UTIS……

- **<u>Indications for early referral:</u>**

  - Previous abdo-/perineal surgery
  - Previous stone disease
  - Gross hematuria after infection resolution
  - Bacterial persistence despite appropriate ABS
  - Previous urological trauma / surgery
  - Immunocompromised
  - Urease splitting bacteria –proteus/ pseudomonas
  - Pneumaturia/ feacaluria

Infections in men

- Think stagnant fluid – can it be corrected
  - Most commonly older men retaining fluid from outflow obstruction
  - Anatomy abnormality
- Prostate/testicle Infection versus pain
  - Cipro is not with out its risks
- Longer course of antibiotics then for females

urology INSTITUTE

Your Future of Wellbeing

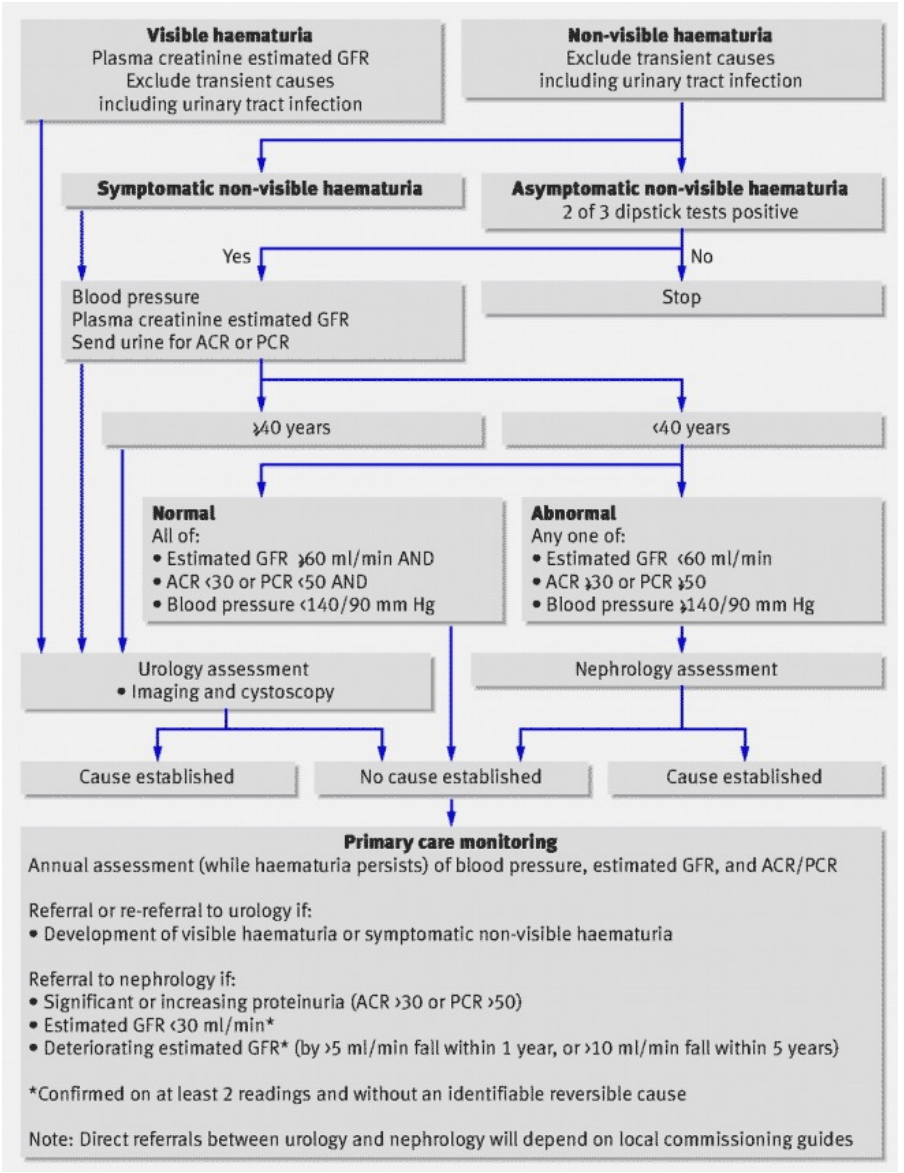
COMMON PROBLEMS….

Question time

- What tests (if any) would you request?
- What is the most common cause of haematuria
- Does microscopic haematuria on one sample require referral
- What would make you concerned for referral?

Haematuria

https://aucklandregion.communityhealthpathways.org/17392.htm



MACROSCOPIC / GROSS HAEMATURIA

- VISIBLE HAEMATURIA
  - PINK
  - RED
  - COLA COLOUR

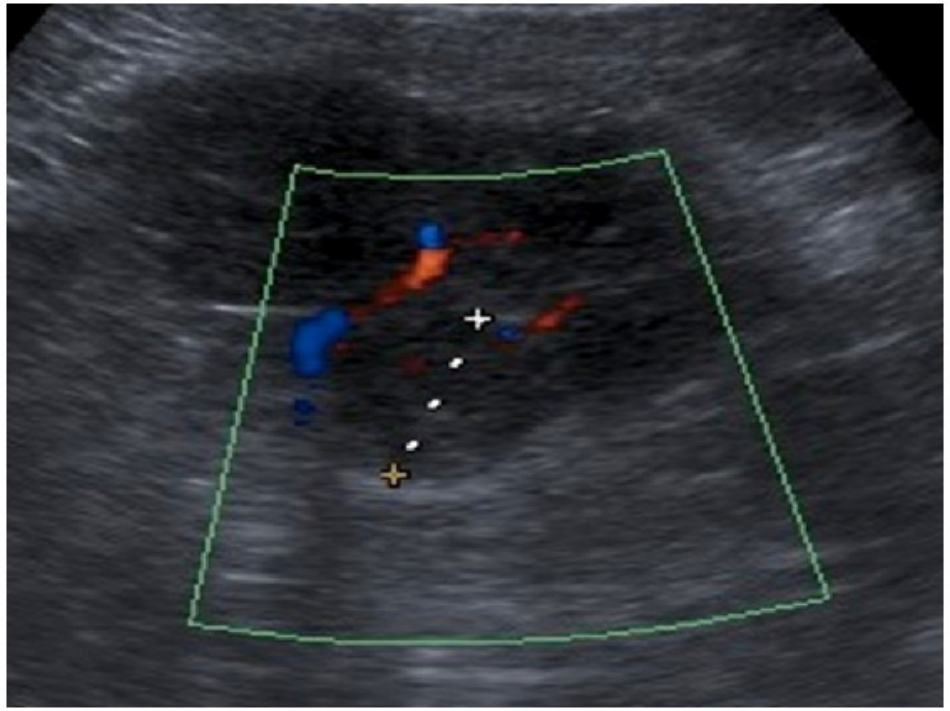
- REFER!!
  - OUTSIDE OF TRANSIENT CAUSES (including infection)
  - If in Retention – straight to ED

Your Future of Wellbeing

MACROSCOPIC / GROSS HAEMATURIA

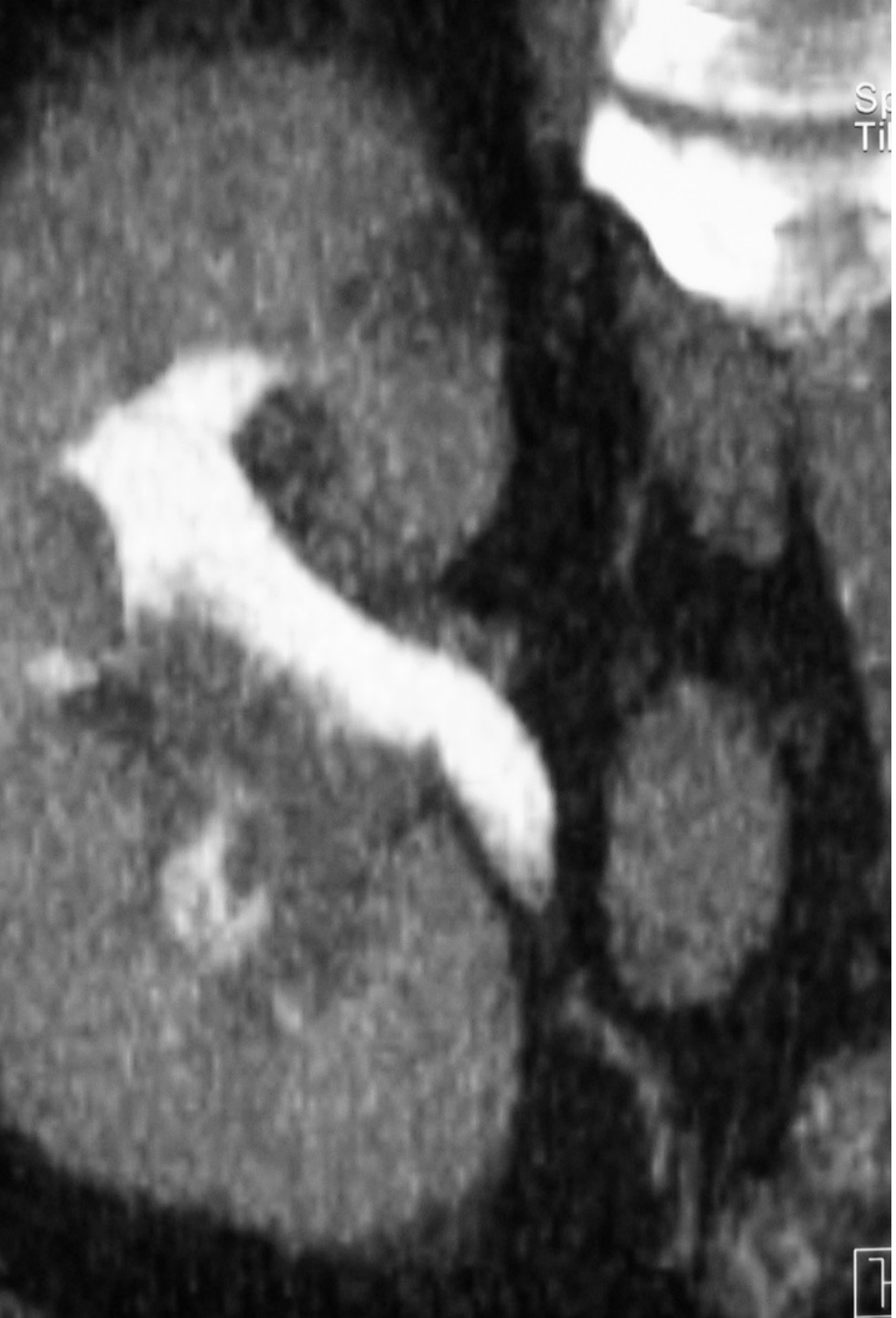
- Cancer until proven otherwise
- Key questions:
  - Fever, systemic symptoms - ? infection
  - Pain - ?stone
- Anticoagulation is not an excuse for bleeding

Imaging



- Ultrasound:
  - Available access in primary care
  - No radiation
  - Will quickly identify large abnormality

  - Less sensitive then CT:
    - May miss small renal mass
    - May miss small urothelium lesions



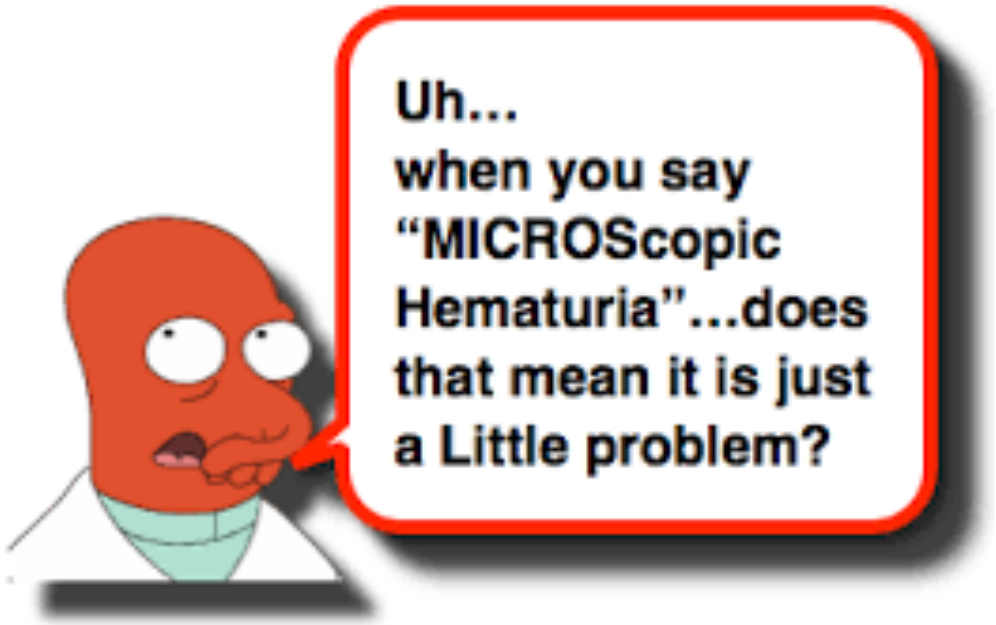
CTIVU (delayed contrast)

- Most sensitive test
- International guidelines
- Pick up small abnormalities

- If negative ultrasound and negative cystoscopy then still need CTIVU

Microscopic haematuria

MICROSCOPIC HAEMATURIA



- **Dipstick first then confirm with formal urine**
- **Male: >15 RBC per HPF 2 occasions**
- **Female: >35 RBC per HPF 3 occasions**
- **<40 and non-smoker refer to nephrology**
- **1.5% chance of malignancy**
- **But don’t forget nephrology**

Urine cytology?

- Very specific but not at all sensitive
- Very dependent on pathologist
- “Atypical cells of unknown significance” seems to happen alot

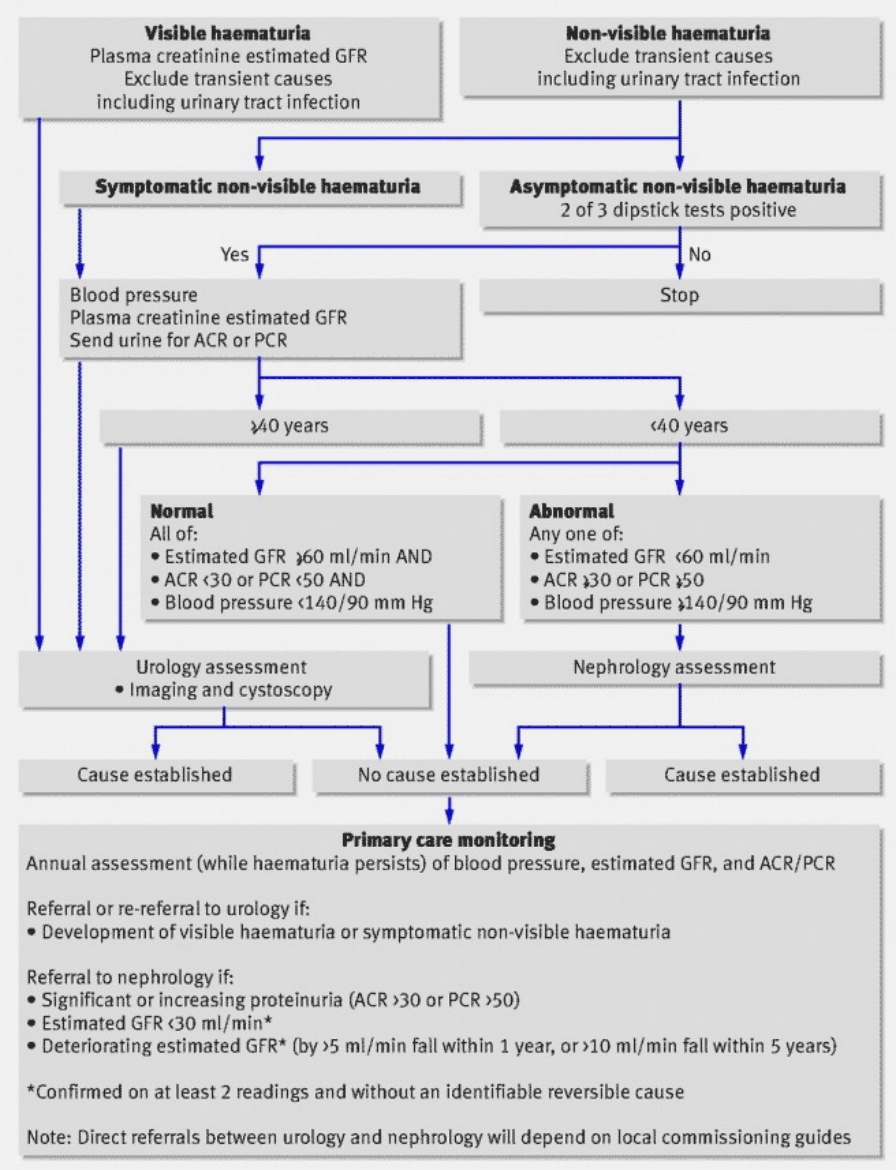
Cx Bladder

- 3 types of tests
  - Triage
  - Detect
  - Monitor

- Urine sample - RNA
- Counties and North Shore, not Auckland
- Score 1-10, > 4 risk is high to warrant investigation

How I approach it

- Confirm it on multiple urine samples first – don't rely on dipstick
- Risk stratify:
  - Smoker, occupational exposures, age (>40 vs <40), previous TURP
- Renal tract USS:
  - Stones, masses, prostate size, residual, other abnormalities
- I forgot about renal causes but should check BP + protein
- Flexible cystoscopy


Visible haematuria
Plasma creatinine estimated GFR
Exclude transient causes
including urinary tract infection
Non-visible haematuria
Exclude transient causes
including urinary tract infection
Symptomatic non-visible haematuria
Asymptomatic non-visible haematuria
2 of 3 dipstick tests positive
Yes
No
Blood pressure
Plasma creatinine estimated GFR
Send urine for ACR or PCR
Stop
≥40 years
<40 years
Normal
All of:
• Estimated GFR ≥60 ml/min AND
• ACR <30 or PCR <50 AND
• Blood pressure <140/90 mm Hg
Abnormal
Any one of:
• Estimated GFR <60 ml/min
• ACR ≥30 or PCR ≥50
• Blood pressure ≥140/90 mm Hg
Urology assessment
• Imaging and cystoscopy
Nephrology assessment
Cause established
No cause established
Cause established
Primary care monitoring
Annual assessment (while haematuria persists) of blood pressure, estimated GFR, and ACR/PCR
Referral or re-referral to urology if:
• Development of visible haematuria or symptomatic non-visible haematuria
Referral to nephrology if:
• Significant or increasing proteinuria (ACR >30 or PCR >50)
• Estimated GFR <30 ml/min*
• Deteriorating estimated GFR* (by >5 ml/min fall within 1 year, or >10 ml/min fall within 5 years)
*Confirmed on at least 2 readings and without an identifiable reversible cause
Note: Direct referrals between urology and nephrology will depend on local commissioning guides

If all work up is normal

- Have we addressed the concern that bought them in to see you?
  - Overactive bladder, pain ?
- No further investigations required to rule out cancer unless they develop visible haematuria in the future

Primary care monitoring

Annual assessment (while haematuria persists) of blood pressure, estimated GFR, and ACR/PCR

Referral or re-referral to urology if:

- Development of visible haematuria or symptomatic non-visible haematuria

Referral to nephrology if:

- Significant or increasing proteinuria (ACR ›30 or PCR ›50)
- Estimated GFR ‹30 ml/min*
- Deteriorating estimated GFR* (by ›5 ml/min fall within 1 year, or ›10 ml/min fall within 5 years)

*Confirmed on at least 2 readings and without an identifiable reversible cause

Note: Direct referrals between urology and nephrology will depend on local commissioning guides

TAKE HOME POINTS

- **MACROSCOPIC HAEMATURIA:** WITHOUT INFECTION – **IMMEDIATE REFERRAL**
- **MICROHAEMATURIA:** FOLLOW PATHWAYS BUT AWARE OF PATIENT RISK FACTORS
- **FEMALE PATIENTS**:
  - REMEMBER THE URINARY TRACT WHEN NO CAUSE OF POST MENOPAUSAL/ PERI-MENOPAUSAL BLEEDING IS FOUND

urology INSTITUTE

Your Future of Wellbeing

Short bursts

Acute testicular pain

- If <6 hours onset – send straight to ED (avoid risk)
  - Uncommon over age of 20

- Everything else:
  - Urinary symptoms, prev surgery, examination, ultrasound
  - Rest and elevation likely often more helpful then antibiotics

Penis lesions

- SCC penis very rare - if circumcised almost non-existent
- General Practitioners see more lesions then we do
  - Patients are concerned infection – more often then not they aren't
  - Dermatology pathway – fungal, steroid, fungal + steroid

By the end of this section you should feel confident to:

- Accurately assess a man with urinary symptoms
- Understand the potential causes of symptoms
- Have a treatment algorithm for General Practice?
- Identify red flags/ reasons for referral
- Basic understanding of treatment options to better inform your patients.

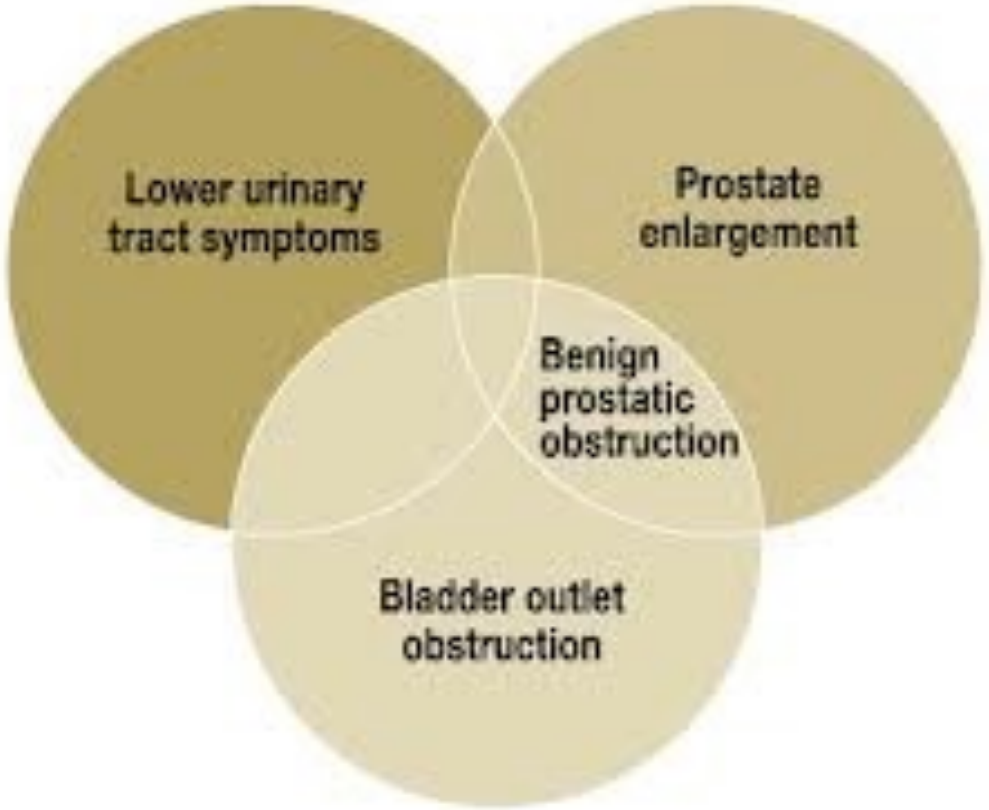
Question time

- What tests (if any) would you request?
- What drugs would you prescribe and what side effects?
- What would be red flags/ reasons for referral?
- What are the causes of men’s urinary symptoms

MR. T

76y “I’m sick of having to get up to go to the toilet at night so much”

SO ITS JUST A PROSTATE PROBLEM, RIGHT?



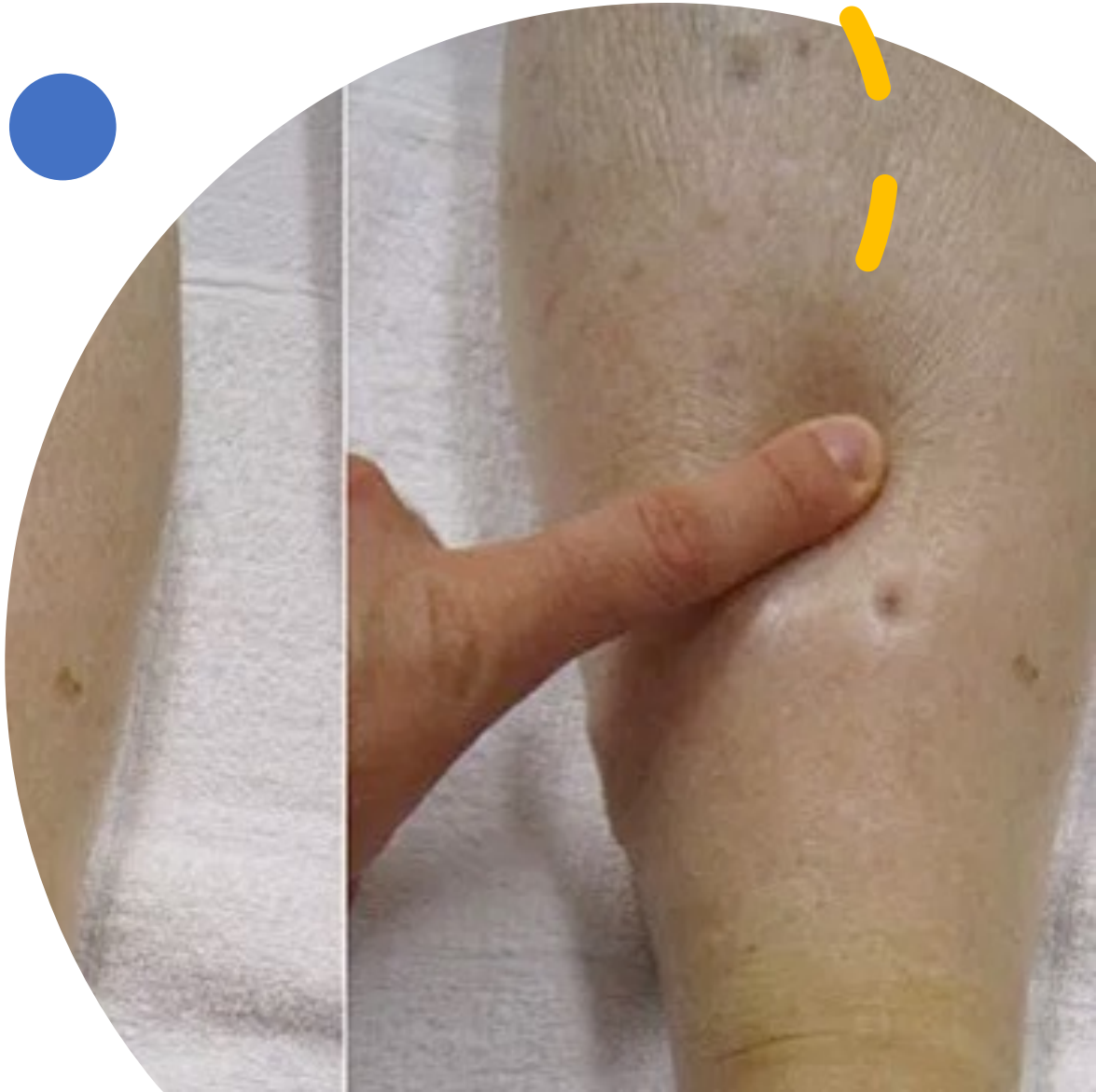
Your Future of Wellbeing

It takes 2 to tango

- Prostate:
    - Benign obstruction
        - Prostate cancer
        - Stricture
- Bladder:
    - Overactivity/poor emptying:
    - 2ndry to Obstruction

And sometimes it has nothing to do with the renal tract

- Fluid related:
  - Diabetes
  - CHF
  - OSA
  - Etc.



Initial Assessment:

- History
- Exam
- Other tests
- Investigations

Questions to ask

- “What is your biggest bother?”
- Urinary symptoms during day
  - “How would you describe your flow”
  - “Do you feel like you completely empty?”
  - “If you have the urge to go can you hold on, or do you need to go straight away”
- Urinary symptoms during the night:
  - “how much bother does it cause?”
  - “Is it worth getting out of bed for? Do you pass a little or a lot?”
  - “What wakes you up?”
- Incontinence/leakage
- Fluid intake during day and night

Bother is the key

- “If you had to life the rest of your life the way your symptoms are today how would you feel?”
- “Do you think your symptoms are bad enough that you would take medication to help?
- What is the real reason patient is here?
    - Concerned about cancer.

AUA SYMPTOM SCORE (AUASS)

PATIENT NAME: _____ **TODAY'S DATE:** _____

(Circle One Number on Each Line)	Not at All	Less Than 1 Time in 5	LessThan Half the Time	About Half the Time	More Than Half the Time	Almost Always
Over the past month or so, how often have you had a sensation of not emptying your bladder completely after you finished urinating?	0	1	2	3	4	5
During the past month or so, how often have you had to urinate again less than two hours after you finished urinating?	0	1	2	3	4	5
During the past month or so, how often have you found you stopped and started again several times when you urinated?	0	1	2	3	4	5
During the past month or so, how often have you found it difficult to postpone urination?	0	1	2	3	4	5
During the past month or so, how often have you had a weak urinary stream?	0	1	2	3	4	5
During the past month or so, how often have you had to push or strain to begin urination?	0	1	2	3	4	5
	None	1 Time	2 Times	3 Times	4 Times	5 or More Times
Over the past month, how many times per night did you most typically get up to urinate from the time you went to bed at night until the time you got up in the morning?	0	1	2	3	4	5

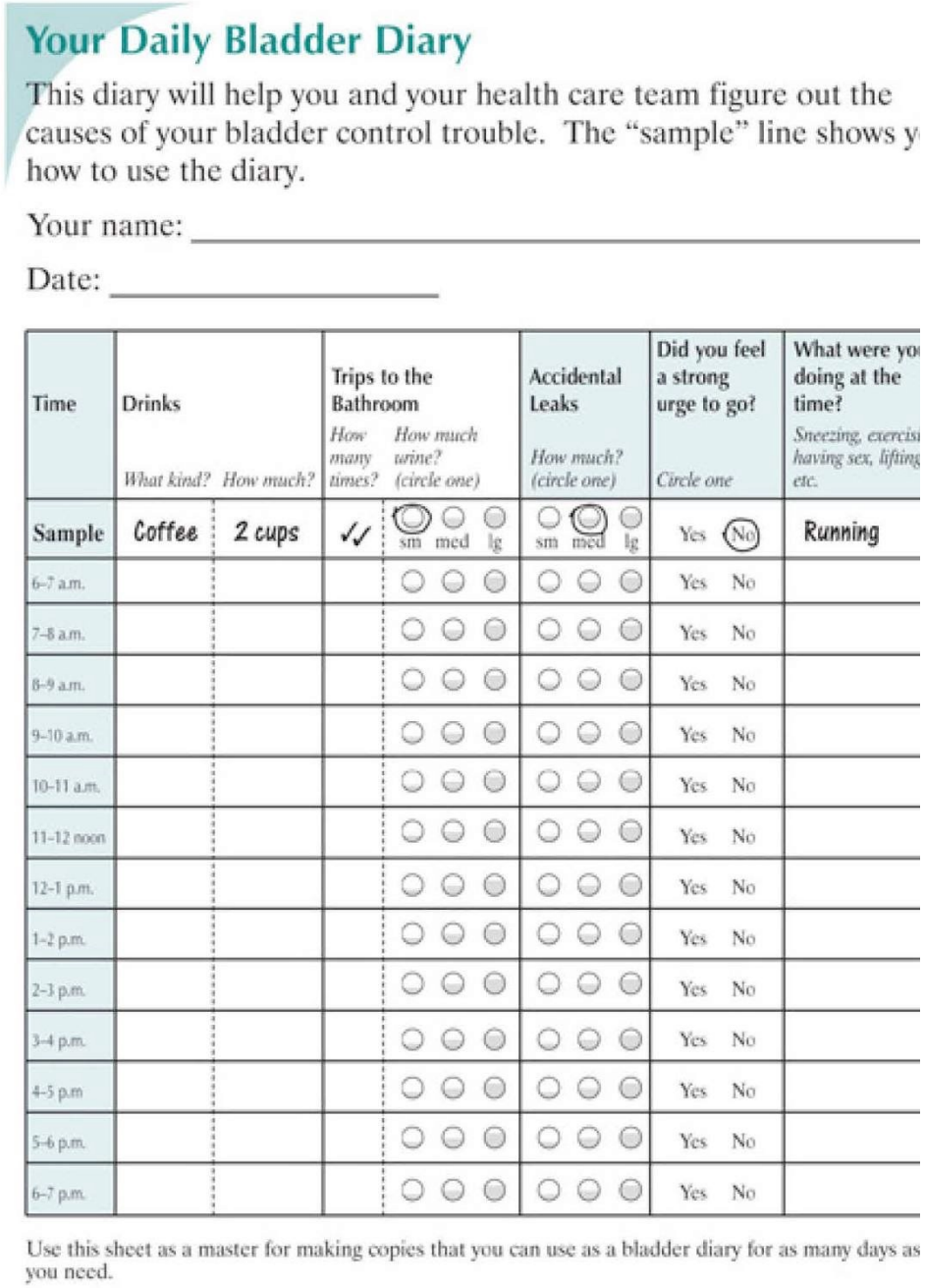
Add the score for each number above and write the total in the space to the right. **TOTAL:** _____

SYMPTOM SCORE: 1-7 (Mild) 8-19 (Moderate) 20-35 (Severe)

QUALITY OF LIFE (QOL)

	Delighted	Pleased	Mostly Satisfied	Mixed	Mostly Dissatisfied	Unhappy	Terrible
How would you feel if you had to live with your urinary condition the way it is now, no better, no worse, for the rest of your life?	0	1	2	3	4	5	6

Figure 1: An Example of a Bladder Record at:
http://kidney.niddk.nih.gov/KUDiseases/pubs/diary/pages/page1.aspx



Your Daily Bladder Diary

This diary will help you and your health care team figure out the causes of your bladder control trouble. The "sample" line shows y how to use the diary.

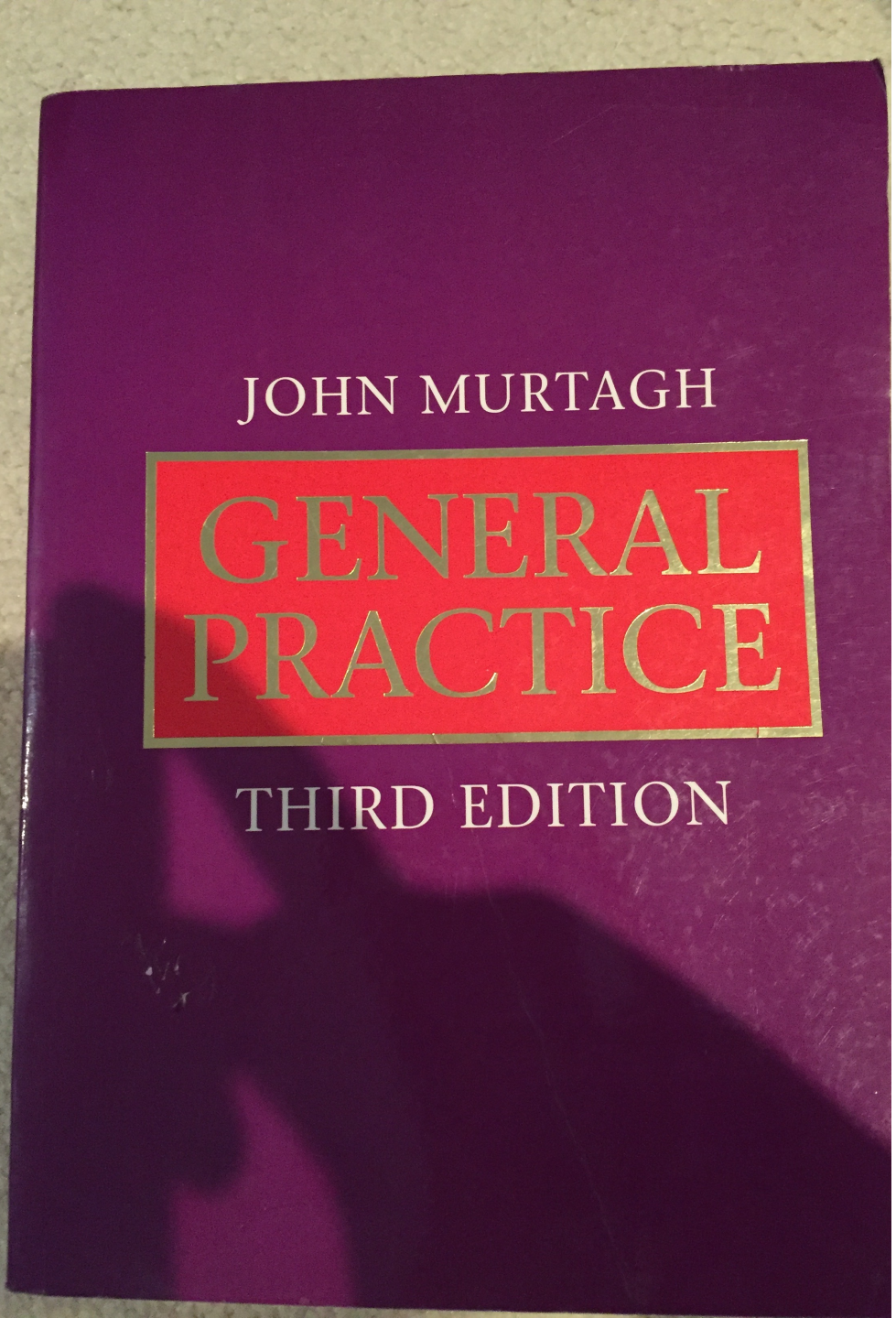
Your name: _____

Date: _____

Time	Drinks		Trips to the Bathroom		Accidental Leaks	Did you feel a strong urge to go?	What were yo doing at the time?
	What kind?	*How much?*	*How many times?*	*How much urine? (circle one)*	*How much? (circle one)*	*Circle one*	*Sneezing, exercis having sex, liftin etc.*
Sample	Coffee	2 cups	✓✓	sm (med) lg	sm (med) lg	Yes (No)	Running
6–7 a.m.				sm med lg	sm med lg	Yes No	
7–8 a.m.				sm med lg	sm med lg	Yes No	
8–9 a.m.				sm med lg	sm med lg	Yes No	
9–10 a.m.				sm med lg	sm med lg	Yes No	
10–11 a.m.				sm med lg	sm med lg	Yes No	
11–12 noon				sm med lg	sm med lg	Yes No	
12–1 p.m.				sm med lg	sm med lg	Yes No	
1–2 p.m.				sm med lg	sm med lg	Yes No	
2–3 p.m.				sm med lg	sm med lg	Yes No	
3–4 p.m.				sm med lg	sm med lg	Yes No	
4–5 p.m				sm med lg	sm med lg	Yes No	
5–6 p.m.				sm med lg	sm med lg	Yes No	
6–7 p.m.				sm med lg	sm med lg	Yes No	

Use this sheet as a master for making copies that you can use as a bladder diary for as many days as you need.

- Polyuria nocturia
- Self reflection on fluid
- Assess functional capacity
- Something to use as baseline



Murtagh Red Flags

- Blood in urine
- New back pain /neurological
- Wetting the bed at night (overflow incontinence)
- Recurrent infections
- Previous urological surgery

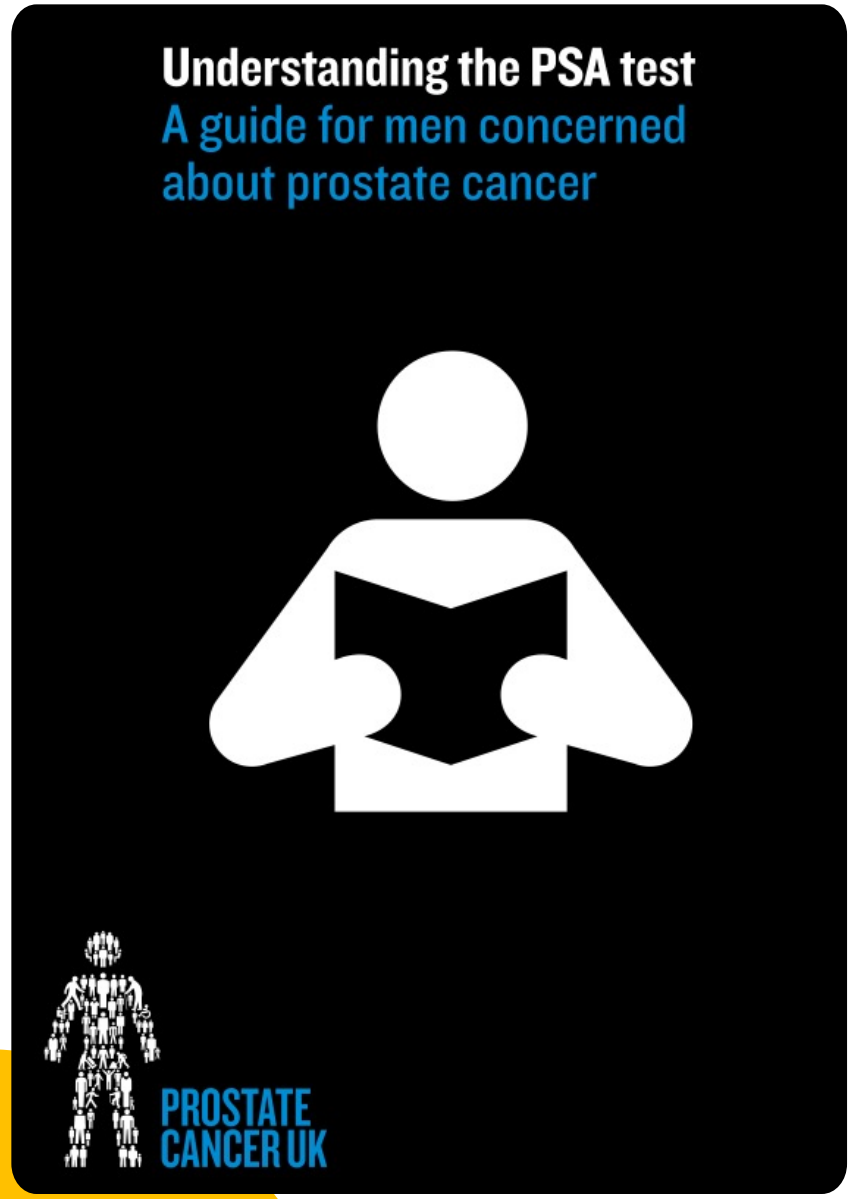
Back to our patient

- “Urine dribbles a bit”

- Past Med Hx:
  - No urological history
  - Hypertension – on ACE
  - AF on Dagabatrin
  - No other medications

Is an exam helpful?

- PR exam?
- Anything else?
  - Genitalia
  - Abdomen



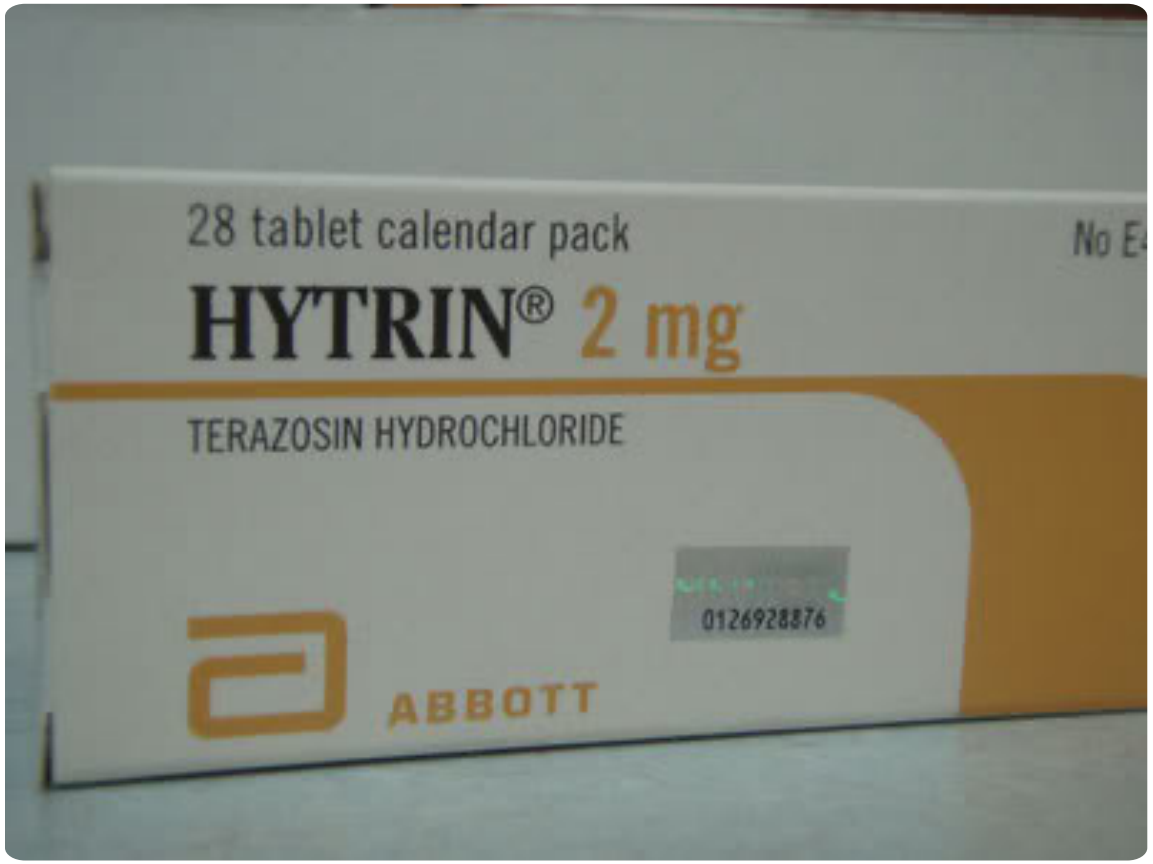
Treat Empirically or do investigations

- Dipstick
  - Negative
- Blood tests
  - PSA - ? Can of worms
  - Always have time to think about

  - Things we shouldn’t routinely do:
    - ultrasound, blood tests, cystoscopy

So it’s a prostate problem

- Alpha blocker
- Which one?
- Which dose?

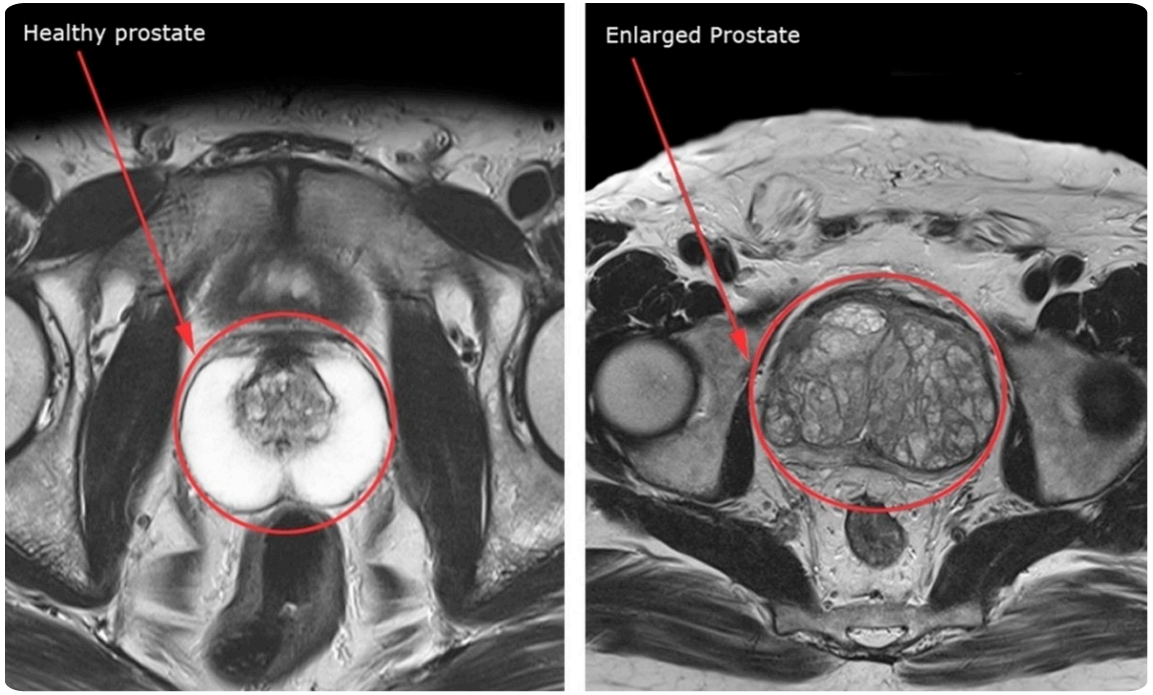


Alpha-blockers

- Non-selective:
  - Doxazosin
  - Terazosin
    - Similar efficacy, need to titrate dose
- Selective (therefore no postural hypotension):
  - Tamsulosin 0.4mg OD
    - Special Authority, no titration

Be wary of side effects

- We all know postural hypotension
- Sexual function
  - Anejaculation
  - Retrograde ejaculation



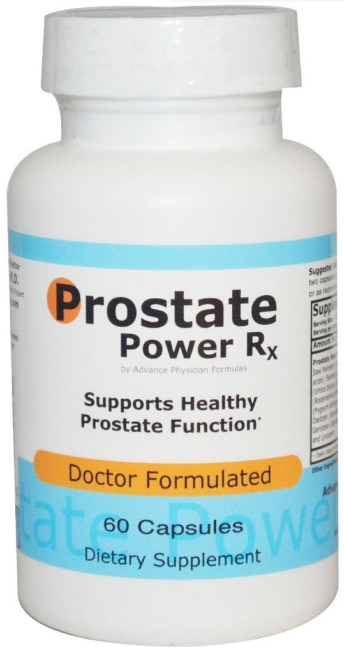
Where does finasteride fit in?

- 5 alpha reductase inhibitor – testosterone metabolism
- Special Authority in NZ
  - (failed on alpha blocker)
- Doesn't work if prostate <40ml
  - (ie not enlarged)
- Decreases PSA levels
  - effect on surveillance
- Conflicting data around high risk prostate cancer concerns

How do I use Finasteride

- Second line agent once alpha-blocker not working
- Generally avoid in young men
  - Sexual side effects, small prostates
- Advise will take 3-6 months to take effect.

“But what about going natural Doc”



The #1 "five-star rated" doctor formulated prostate supplement on Amazon.com for a reason - it works!

- Saw Palmetto and other compounds have been shown to improve urinary symptoms
- Expensive
- Still have side effects
- Empowering the patient

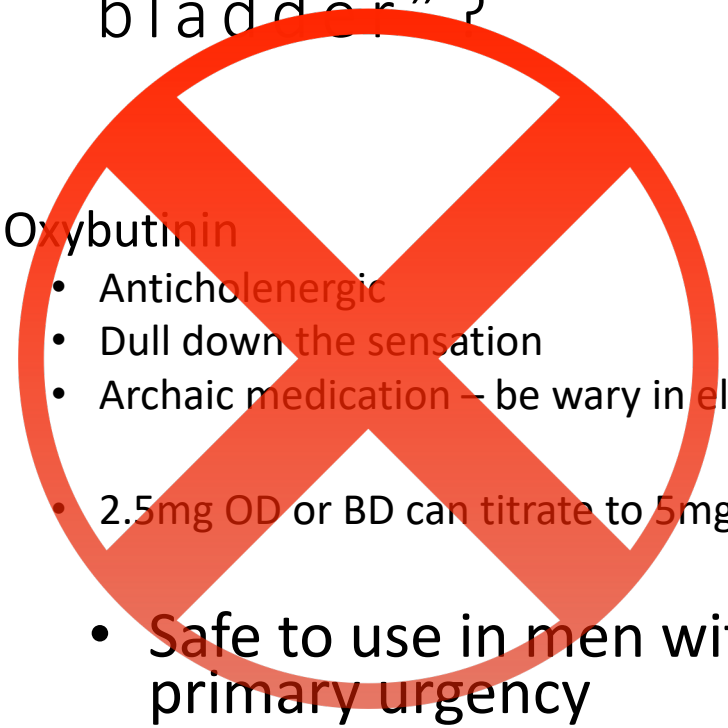
3 months later

- No improvement in his night time symptoms
- Flow maybe slightly better
- Ongoing urgency and frequency

Options

- Further treatment?
- Refer to specialist?

Is there such a thing as a "weak bladder"?



- Oxybutinin
  - Anticholenergic
  - Dull down the sensation
  - Archaic medication – be wary in elderly
  - 2.5mg OD or BD can titrate to 5mg TDS
  - Safe to use in men with primary urgency symptoms.

Dry mou


ANTICHOLINERGIC SIDE EFFECTS
Hot as a hare
Dry as a bone
sketchymedicine.com
Blind as a bat
Red as a beet
Mad as a hatter

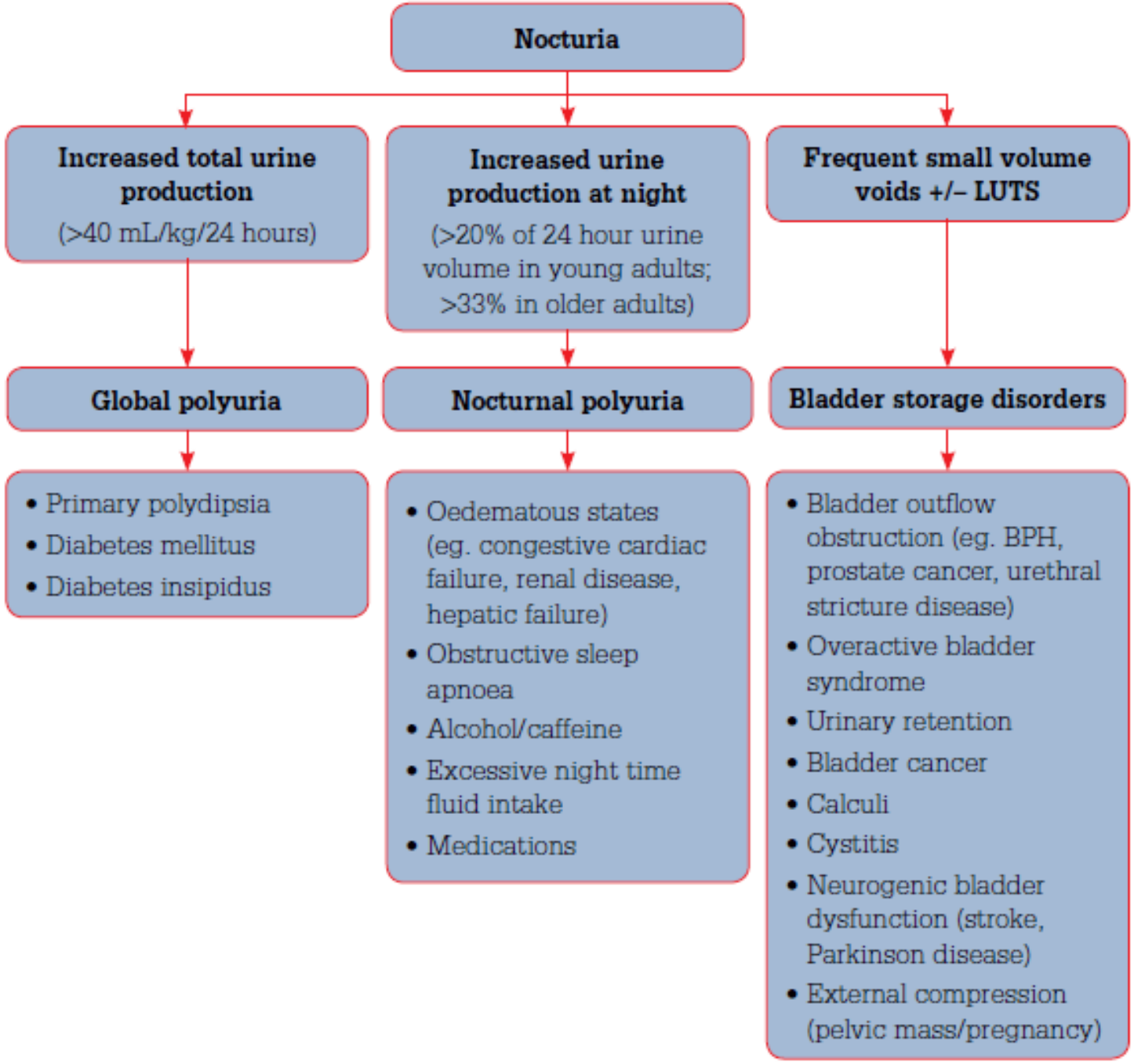
Solafenacin

- Special authority:
  - Intolerant to oxybutinin
  - Start at 5mg can increase to 10
  - Should be standard treatment

Despite all this.
still getting up in the night. Is there anything else
or resigned to this for life?

- Nocturia is difficult to treat because it is of multi-factorial cause

N es


Nocturia
Increased total urine production
(>40 mL/kg/24 hours)
Increased urine production at night
(>20% of 24 hour urine volume in young adults; >33% in older adults)
Frequent small volume voids +/– LUTS
Global polyuria
Nocturnal polyuria
Bladder storage disorders
• Primary polydipsia
• Diabetes mellitus
• Diabetes insipidus
• Oedematous states (eg. congestive cardiac failure, renal disease, hepatic failure)
• Obstructive sleep apnoea
• Alcohol/caffeine
• Excessive night time fluid intake
• Medications
• Bladder outflow obstruction (eg. BPH, prostate cancer, urethral stricture disease)
• Overactive bladder syndrome
• Urinary retention
• Bladder cancer
• Calculi
• Cystitis
• Neurogenic bladder dysfunction (stroke, Parkinson disease)
• External compression (pelvic mass/pregnancy)

Nocturia is of multifactorial cause

- General Practitioners often better at treating as have expertise to manage all of the potential causes and provide continuity of care in terms of side effect profiles.
- NICE guidelines on Nocturia – written by General Practitioners

Specific scenarios

Young men <40 with lower urinary tract symptoms:

- Unlikely to be BPH causing obstruction
- Most likely overactive bladder:
  - Treat accordingly
- Rare but need to rule out stricture:
  - Almost exclusively in those with previous surgery
  - Very Poor flow
- Do not routinely perform PSA

85y rest home resident dementia

- Treatment side-effects amplified
    - TURP study
    - Medication
    - We will not be making a 20year olds bladder
- Who is driving treatment?
- Incontinence products versus catheter

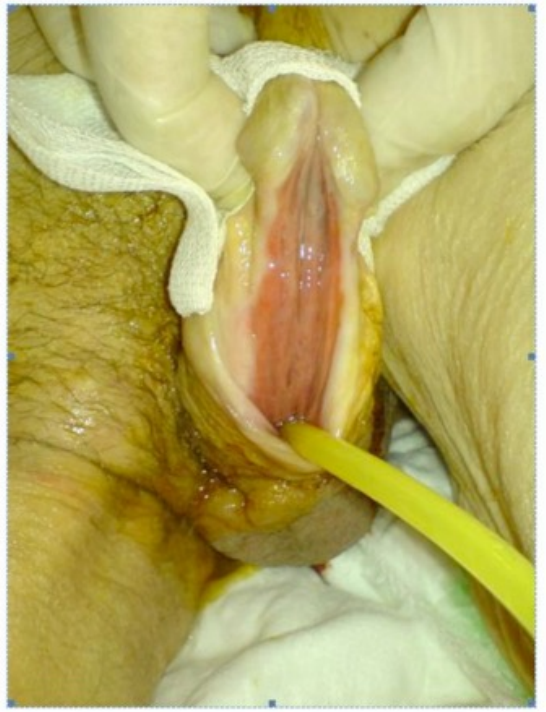


Figure 1. Urethral destruction looks like penoscrotal hypospadias and urethral catheter was indwelled.

Urinary retention

- Pain+ inability to pass urine = acute retention
  - Needs IDC, GP practice should not be expected to have equipment for this.
- Large residual volume = chronic retention
  - Does not need treatment in itself
  - Can lead to : renal failure, infections, stones.
  - Surgery to fix prostate may not fix the problem 100%

Surgical options

The surgical landscape

- The good old TURP
- Laser
- Urolift
- Rezum – water vapourisation
- Prostate artery embolisation

The goal of surgery

- Widen the Pipe
- Minimise side effects
- Balancing act
- Cant make bladder squeeze harder

What do I say to my patients?

- Risk versus Reward
- Tailored assessment to them – the procedure you came in the door wanting may actually not be the best for you.
- This is not a procedure for cancer so take your time deciding and know what the goal of treatment is

A new paradigm

- No longer:
- medication……if fails surgery
- But rather:
- Medication and/or less invasive procedure if these fail further surgery

By the end of this talk you should feel confident to:

- Accurately assess a man with urinary symptoms
- Understand the potential causes of symptoms
- Have a treatment algorithm for General Practice?
- Identify red flags/ reasons for referral
- Basic understanding of treatment options to better inform your patients.

urology INSTITUTE

Your Future of Wellbeing

Stones- 10/10 pain

https://aucklandregion.communityhealthpathways.org/524636.htm

Kidney stones are common

- In the Auckland region we do over 1000 ureteroscopy operations per year
- Over 60% of the acute work is stone related
- Higher rates in Maori and Pacific Islanders

Kidney stones are painful

- Patients are scared – never experienced this type of pain
- Patients are vulnerable
- Patients are in a state ready for change to avoid the pain again

Question time

- How do you determine if they have a kidney stone?
- What is the best pain relief for acute colic/ why is it so painful
- What do you do with an incidentally found kidney stone on a scan
- What advice would I give a patient who wants to prevent further kidney stones?

Its Acute pain not a kidney stone

- Great mimicker of other conditions
- POAC imaging for CT non contrast
- Send to ED:
  - Severe pain
  - Fever (true urological emergency)
  - Risk factors

Diagnosed ureteric stones

- 90% of stones will pass spontaneously
  - The bigger the less likely
  - >5mm less then 30%
  - Refer if >6mm

- Stones don’t cause pain – obstruction causes pain
- NSAIDS best , morphine only in acute setting

Diagnosed kidney (intra-renal) stones

- Often asymptomatic as no obstruction
- >10mm refer to urology
- If history of stones or new concerns refer.

Diet tips to prevent stones

Drink enough fluids each day

- Pass more than 2 litres of urine each 24 hours
- Drink at least 3 litres of fluids (more than this if you exercise heavily or are in hot weather)
- Spread your fluid intake throughout the day and night (all drinks count – water, coffee, tea, milk)
- Drink more low sugar, sugar-free beverages
- Drink beer, wine, spirits in moderation

Make good choices about what you eat and drink

General guidelines from the Ministry of Health "Eating and Activity Guidelines for New Zealand Adults" will benefit most stone formers.

Enjoy a variety of nutritious foods every day including:

- Plenty of fruits and vegetables
- Grain foods, mostly wholegrains
- Some milk and milk products
- Some legumes, nuts, fish, eggs, poultry, red meat
- Choose and prepare foods that are low in salt with little or no added sugar

www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adults

Achieve a healthy body weight

Make good choices about what you eat and drink and be physically active to achieve and maintain a healthy body weight

Referral to a dietitian may be required

Some people may require more specific nutrition care. A dietitian experienced in kidney stone management can provide targeted nutrition therapy based on your type of stone, specific needs and stone risk factors.

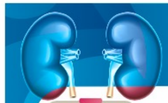
Information based on Urology Care Foundation™ "Kidney Stones: A Patient Guide", Developed in 2015

Prepared by Auckland DHB Kidney Stone Project Group 2016 | In collaboration with Urology and Renal Services

Welcome *Haere Mai* | Respect *Manaaki* | Together *Tūhono* | Aim High *Angamua*

AUCKLAND DISTRICT HEALTH BOARD Te Toka Tumai

MedPhoto&Graphics Auckland District Health Board MAR 2017



Kidney Stones

A patient guide

Kidney stone disease is one of the oldest and most common problems of the urinary system.

People often get stones in mid-life where family and work commitments are at their highest which makes stones costly.

Kidney stones are often very painful and can keep happening in some people.

More than 8,000 New Zealanders will get a kidney stone this year

Tim has lived with stones for over 7 years. In 1995 he had his first stone surgery, shockwave lithotripsy. He also had stones removed with Ureteroscopy surgery in 2000. Stones have been a part of his life for many years.

"The pain is the worst thing" *says Tim.*

Tim has had help to prevent stones forming. He is now careful about how much he drinks and what he eats. He wishes he had known years ago how important drinking fluids was in reducing the risk of stones.

"I am much better educated today about how to prevent kidney stones" *says Tim.*

"I drink a lot of fluids and have cut down on eating some foods that form my stones."

Men get kidney stones more often than women but the number of **women** getting stones is rising.

Changing what you eat and using medication can be good ways to stop stones forming.

AUCKLAND DISTRICT HEALTH BOARD Te Toka Tumai

Get the facts

What are kidney stones?

Urine contains many dissolved minerals and salts.

When you have high levels of these you can form stones.

What are the symptoms?

Stones in the kidney often do not cause any symptoms. When a stone leaves the kidney it travels to the bladder through the ureter. This may cause severe pain, frequent urination, blood in urine and sometimes nausea and vomiting.

What causes kidney stones?

Major risk factors are low urine volume and mineral imbalances. What you eat and drink can affect your chances of forming a new stone.

What are stones made of?

There are many different types. Calcium oxalate are the most common followed by uric acid and less commonly struvite and cystine stones.

Get diagnosed

"Silent" kidney stones, those that cause no symptoms, are often found when an X-ray is taken in a health examination.

Others have stones diagnosed when sudden pain occurs while a stone is passing and medical attention is needed.

Tests like a CT scan or an Ultrasound may diagnose a stone.

Get treated

Wait for a stone to pass itself:

Waiting for 4- 6 weeks for the stone to pass is safe if the pain is bearable.

Medication:

Certain medications have been shown to improve the chance a stone will pass.

Surgery:

Surgery may be needed to remove a stone from the ureter or kidney.

Surgeries include:

- Shock wave lithotripsy (SWL)
- Ureteroscopy (URS)
- Percutaneous nephrolithotomy (PCNL)
- Your Urologist will discuss this with you.

Drinking enough fluid each day helps to prevent kidney stones

Prevention

What will I need to do to find out why I develop stones?

Stone analysis:

Save any stone you pass so it can be tested to find out what type you have.

Imaging:

X-rays can be done to see where your stones are in your urinary tract.

Blood and urine tests:

Blood tests can help find out if a medical problem is causing your stone.

If you are at high risk of getting stones in the future 24 hour urine tests will be requested to check for stone forming substances in your urine.

Advice on fluid and diet:

You **may** need to change your diet to help prevent stones forming. There is no "one size fits all" diet for preventing stones, everyone is different. Drinking enoughwater and making good choices about what you eat and drink is helpful in preventing stones.

Post procedure Stent irritation

- 70% get it
  - Young + female most likely
- Need to pre-warn + give options
  - Doxazosin, oxybutinin, nsaids
- MSU will always have wbc + rbc
  - Does not equal infection

Prostate cancer

- https://aucklandregion.communityhealthpathways.org/25409.htm

- NZ Doctors article in E-learning

Clinical Scenario

- 55y male comes to your clinic asking for a men's health check – what would you do?

Shared Decision Model

- Provide online/ written material
  - Kupe
  - Prostate
- Genie and the bottle
- Some statistics I use:
  - PSA <1 at age 50 , <1% significant cancer in 10 years
  - 1/8 men get prostate cancer , 1 in 24 die from this

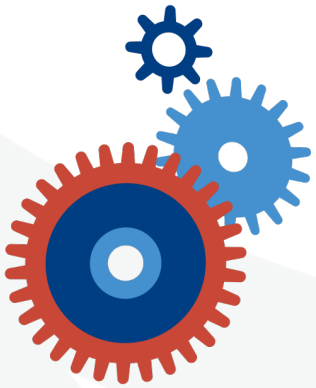
PSA testing

- With any screening test the benefits must be weighed against the risk of over diagnosis and over treatment

Prostate Cancer Management and Referral Guidance

Table 1: Definitions for an abnormal PSA level, by age

Age group	Abnormal PSA level (µg/L)
Men aged ≤ 70 years	≥ 4.0
Men aged 71–75 years	≥ 10.0
Men aged ≥ 76 years	≥ 20.0



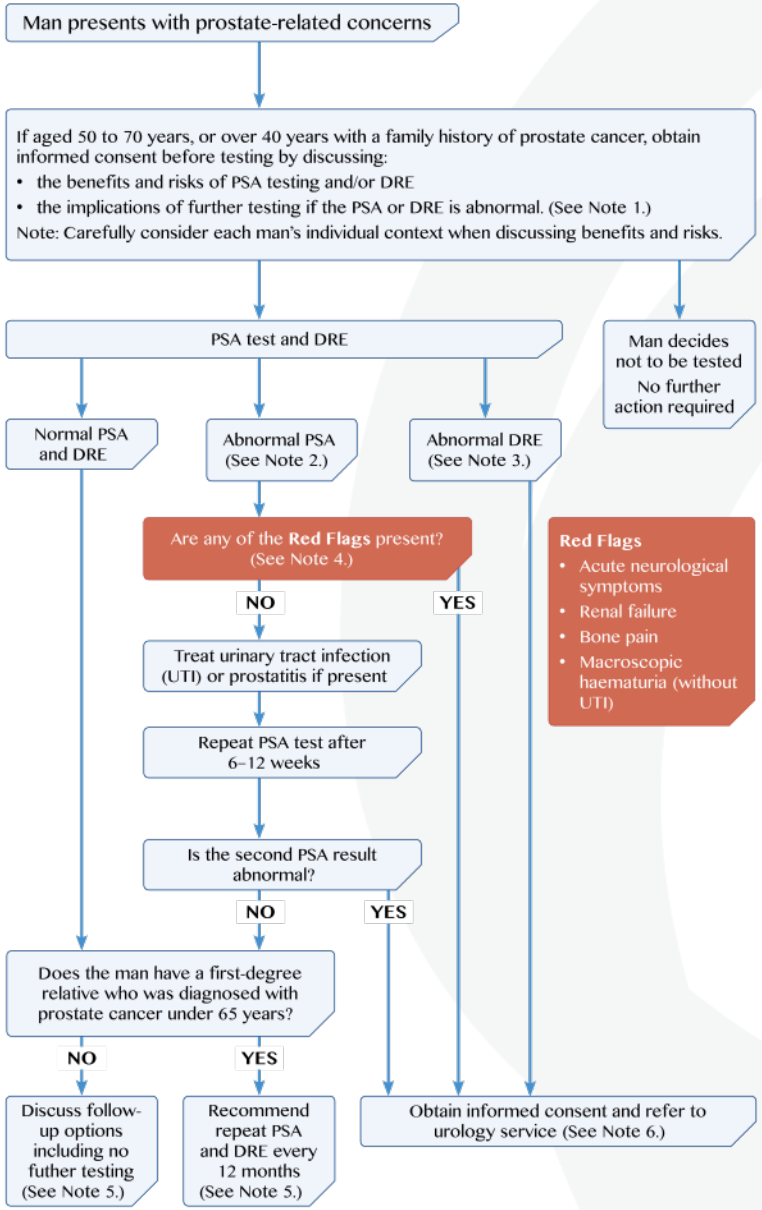
Your Future of Wellbeing

PSA testing

- A single PSA never makes me concerned
- The word cancer makes people very concerned
- The internet is Democratising health information
- MRI personalizes care to the man while PSA is a population based test

- For you it is not whether your patient should have a PSA or not but ensuring if they do you know what to do
- Avoid risk – refer if meet criteria

Algorithm for supporting men with prostate-related concerns



Introduction.

7 Urologists Working Together as a Group

A New Way of doing Urology

Patient Orientated Care:

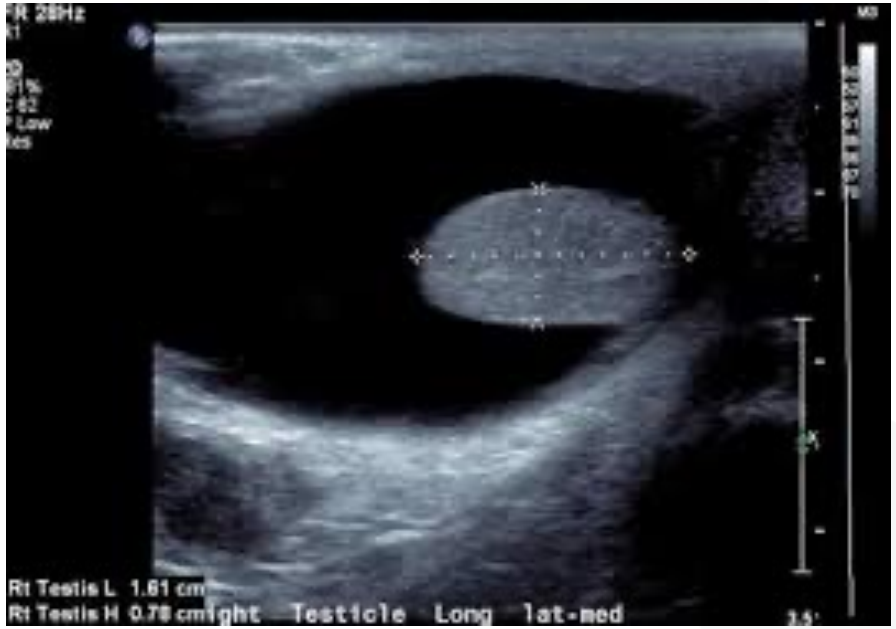
- Urologist available everyday
- Sub specialisation - see the right surgeon
- Diversity. Multiple languages
- Nurse Specialist, Dietician, Physio, Nurses
- Cutting edge technology

Mr I 40y

- “I really feel my scrotal sac dragging every time I go biking on the weekend, is there something I can do about it”

Or maybe you get this radiology report

- Conclusion:
  - A moderate sized hydrocele on the left



Questions to ask

- History
  - Pain questions
  - Social impact
  - Sexual function
- Past hx
- Opportunistic health screening?

Exam

- Consider Chaperone
- Normal side first
- Have a picture of the anatomy in your head
- One hand to fixate the other to palpate
- The scrotum is a sensitive area

Red Flags

- Testicular cancer:
  - 20-40y peak
  - Lump is on teste itself
  - USS and urgent referral if it was found

  - 1 out of every 500-1000 scrotal USS

Ultrasound

- Needs a Question:
- ? Cancer
- ? Structural abnormality
- Everything else is benign
- Variocele 1 in 7 males on left side (feels like can of worms)
- Hydrocele – fluid collection
- Epididymal cyst

Treatment

- Only if symptomatic and causing impact on quality of life
- You can’t just aspirate a cyst or a hydrocele as they will just come back
- Surgery not with out risks

But what about the man with ongoing pain and a normal ultrasound?

Pain management

- ? Referred pain
- All pain is real
- Pain ladder
- Consider neuromodulation
    - Amitryptiline
    - Gabapentine
- Multidisciplinary approach

urology INSTITUTE

ure of Wellbeing

Sexual function in Men

- Not just ED
- Premature ejaculation
- Peyronies
- Libido/ low testosterone
- Phimosis / frenulum

- https://aucklandregion.communityhealthpathways.org/167390.htm

Question time

- What are the contraindications to PDE5
- What would you do if Viagra not working?
- What tests would you do if patient has erectile dysfunction?
- What do you do if man under 30 comes with erectile dysfunction?

Quick Fire

- Premature Ejaculation:

- **“consistently poor ejaculatory control, associated bother, and ejaculation within about 2 minutes of initiation of penetrative sex”**
- **Behavioural**
- **Local – Emla + condom**
- **Systemic - SSRI**

Quick Fire

- ED in young men
  - 3% severe ,11% mild - 2021 large cohort study
  - Ask about masturbation and pornography
  - Blood tests – likely normal
  - Sexual therapists

Quick Fire

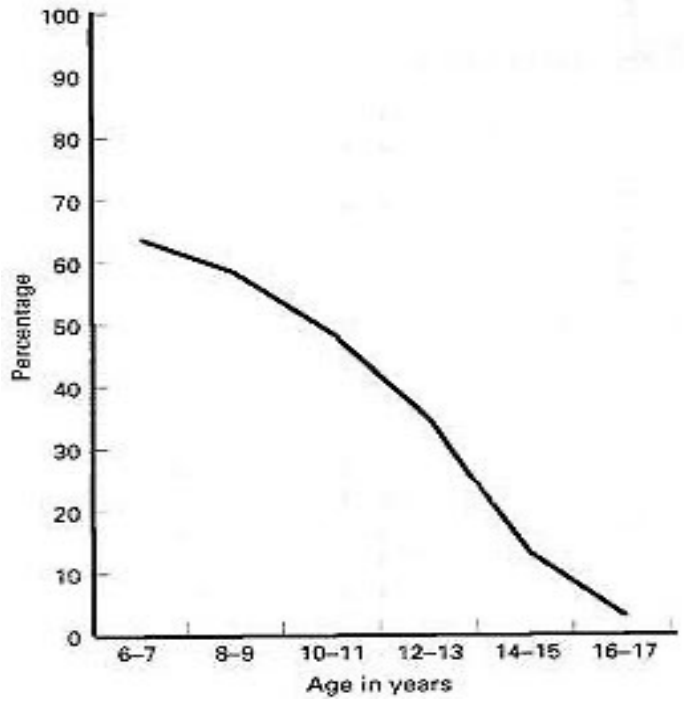
- Peyronies:
  - Bent penis
  - Concerning plaque/ hardness shaft
  - Pain 6 months aprox then settles
  - Bend settles aprox 6-9 month
  - Micro-scarring process
  - Supplements and inj don’t work
  - Surgery if mechanically can’t have sexual activity
  - If seeing specialist picture erect

Quick Fire

- Phimosis
  - Pathological (BXO) versus physiological

CHILDREN

- Physiological process
  - 40% at 1 year
  - 90% at 4 years
  - 99% at 15 years.



- Don’t force it
- Trial steroid cream:
  - 0.05% betamethasone cream should be used twice daily for 2 to 4 weeks.
- Circumcision if complications:
  - Pain
  - Ballooning
  - Recurrent infection
  - Other medical condition

YOUNG ADULTS

- “Always had it but now that I am sexually active it is causing ripping and pain”
- Trial steroid cream
- Discuss options
- Frenuluoplasty
- Circumcision – websites for this

OLDER MEN

- Hygiene issues
- Risk of penile cancer extremely rare
- Lichen Sclerosus – can invade the meatus and urethra
- Catheter management

- Treat under local – dorsal slit or circumcision

Erectile Dysfunction

- Go there
- Normalise
- Educate
- Solutions

ED - assessment

- You guys are the experts at assessing these patients as it is a general health assessment: CVD, Psychosocial, Sexual, Metabolic etc.

- Drugs to watch for:
  - Thiazide diuretics, Spironolactone, SSRI, antipsychotics

- Extra questions I ask:
  - Nocturnal / Early morning erection
  - Sexual activity, partner, trauma

ED - tests

- More about general health screen then specific test for ED
- Testosterone if low libido
- Weird tests:
  - Penile Doppler , Cavernosus injection
  - almost never done as wont change management

ED - treatment

- Sildenafil 100mg PO 12 tablets – 25$
- Tadalafil 20mg PO 8 tablets – 54$

What is the difference?

ED - treatment

- Tadalafil longer half life
- Not effected by having meal prior

- Side effects similar:
  - Headache, seeing blue, reflux

- Key things I say to patients:
  - Doesn’t give you erection but just helps maintain
  - Need to take correctly before saying it doesn’t work
  - Just a drug fixing a physiological process

ED – after Viagra fails

- Injection therapy (Viagra at the source)
- The thought of needle scares patients initially
- Lets not make it Rocket Science

- Prostin / Cavaject / Trimix
- Biggest danger is Priapism - <2%
  - Clinics performing should have a plan in place for this

Post prostate cancer treatment

- Travesty this is not funded for men in the public system
- “A touchy subject” website

- Injections

- Prosthesis

Locations

Central.

- 161 Gillies Ave Epsom Auckland

North.

- 213 Shakespeare Road Takapuna
- 212 Wairau Road Glenfield
- 11 Alnwick Street Warkworth
- 7 Polarity Rise Silverdale
- 2 Fred Thomas Drive, Takapuna

South.

- 10 West Street Pukekohe

East.

- 125 Ormiston Road Flatbush Manukau
- 260 Botany Road Golflands Manukau

West.

- 19 Delta Ave, New Lynn

Your Future of Wellbeing

Questions?

Simon van Rij
0211053882
simon@vanrij.co.nz
svnarij@adhb.govt.nz