## **Incontinence**

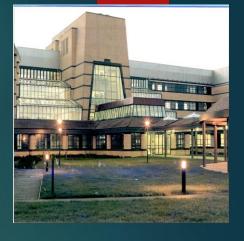
"Giant of Geriatric Medicine"

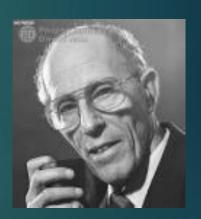
But why do we leak as we age? .

DR RÓNÁN COLLINS

CONSULTANT PHYSICIAN IN GERIATRIC AND

STROKE MEDICINE





## Definitions:

**URINARY INCONTINENCE: (UI):** 

"THE OBJECTIVE INVOLUNTARY LOSS OF URINE".

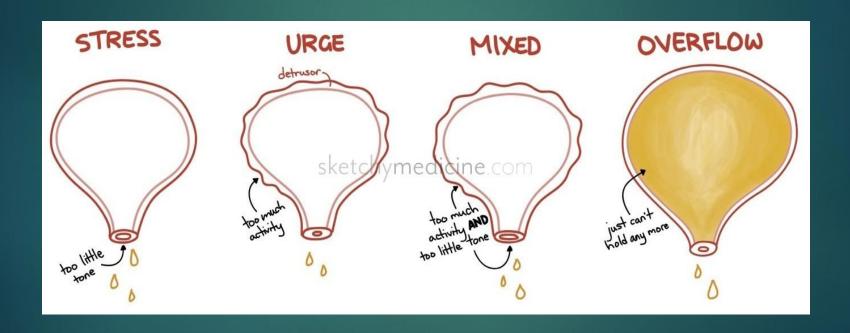
Abrams et al. Neurourol Urodyn 2002

#### **FAECAL INCONTINENCE:**

"INVOLUNTARY LOSS OF LIQUID OR SOLID FAECES"

Perry C et al. Gut 2002

## Types of Continence



## Stress incontinence

Most common type that mainly affects women but can effect men if they have had prostate surgery

#### Caused by:

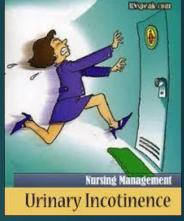
weakened or damaged to muscles or nerves to the Pelvic floo

#### **Characteristics:**

- leaking (cough, sneeze, jump, run or laugh) 20-50mls
- Always know when they leak
- Leak without having had a feeling that they need to go to the toilet
- Nocturnal enuresis absent



## Urge Incontinence



Overactive Bladder results involuntary incontinence accompanied or immediately preceded by urgency

#### **Caused by:**

- Can be unknown
- UTI most common cause
- Neurological e.g. PD, MS (failure to inhibit detrusor contraction)

#### **Characteristics**

- Sudden strong urge to Pass urine and quickly
- Leak moderate to large amounts of urine before they reach the toilet
- Frequency
- Nocturia- at least twice

## Mixed Incontinence

Complaint of involuntary loss of urine associated with urgency and also with effort or physical exertion or on coughing or sneezing

\*Firstly treat the type that is dominant \*

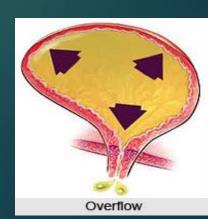


## Overflow Incontinence

Difficulty emptying bladder due to obstruction, infection, constipation, enlarged prostate mainly effects men

#### **Characteristics**

- Hard to pass urine
- Push or strain
- Slow or weak stream not emptying bladder



## Functional Incontinence

- Impaired mental state
- Immobility
- Impaired dexterity
- Unsupportive environment

#### **Characteristics**

- Unable to recognise signals of need to toillet or interpret them wrong i.e need to walk or tidy drawers
- May be recognise the signals but physically incapable of getting there without help
- May experience problems with dexterity i.e MS or Parkinsons



# Assessment 1. History

- Establish the impact on their life
- History of Urinary Symptoms
- Mobility and Manual Dexterity
- Bowel Pattern
- Medical problems that has direct effect on continence i.e number of pregnancy, BPH, surgeries
- Medications
- ▶ Diet& fluids

(Mangnall et al 2010)



#### Part 2 Observation and exam

- ► Physical Examination
- Mobility, manual dexterity
- Communication how they communication
- Urinalysis
- ► Continence aids prior
- Home Environment

#### Part 3

- MDT Treatment plan
- Reassessment date



# Why is Incontinence important

- Because it is so common and distressing
- Because it is so badly neglected and managed by healthcare
- A cause of social isolation and embarrassment
- A cause of falls
- A cause of depression
- Costly to manage
- Often the 'straw that breaks the camels back' in home care

## In reality However

- No Irish <u>National</u> Audit Data
  - √ Stroke
  - √ Dementia
  - √ Hip Fracture / falls
  - x Continence
- Most Hospitals have very limited if any access to
  - □ Specialist continence Advice
  - □ Continence Clinics (interdisciplinary)
  - Urodynamics

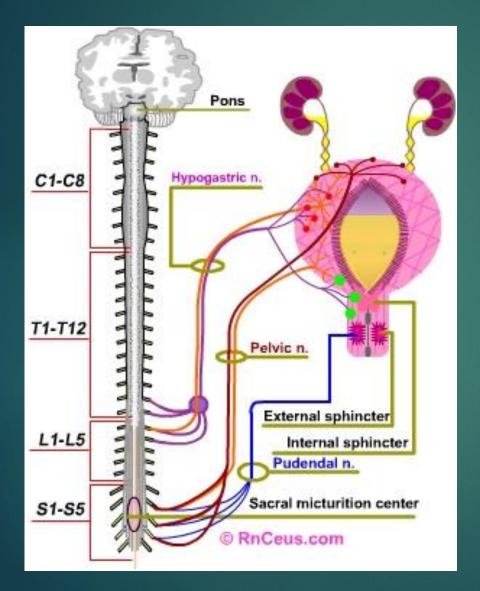
The British Geriatric Society recognises continence care as a key part of ensuring privacy and dignity in care for older people and encourages members to take an active role in its "Behind closed doors" campaign

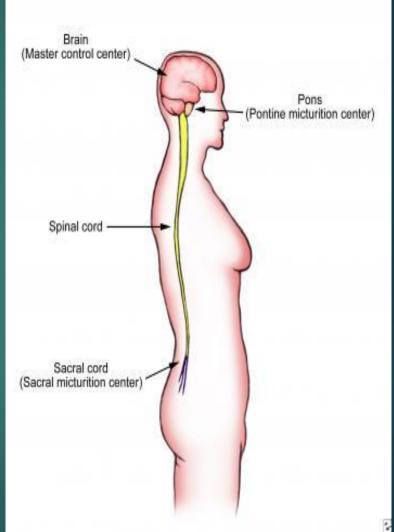
## <u>Time For Enhanced Action in Ireland?</u>





## **Controlling Bladder Function**





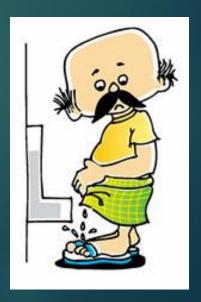
## Urinary Incontinencestrongly Age Related

Age Related changes
To urological tract

- Detrusor overactivity
- Reduced bladder capacity
- Pelvic floor weakness
- Oestrogen loss
- Prostatic enlargement

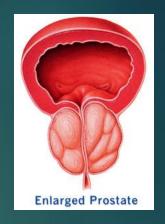
Urge and stress incontinence in women

LUTS , urge and overflow incontinence in men.





## LUTS in men



## **Voiding dysfunction**:

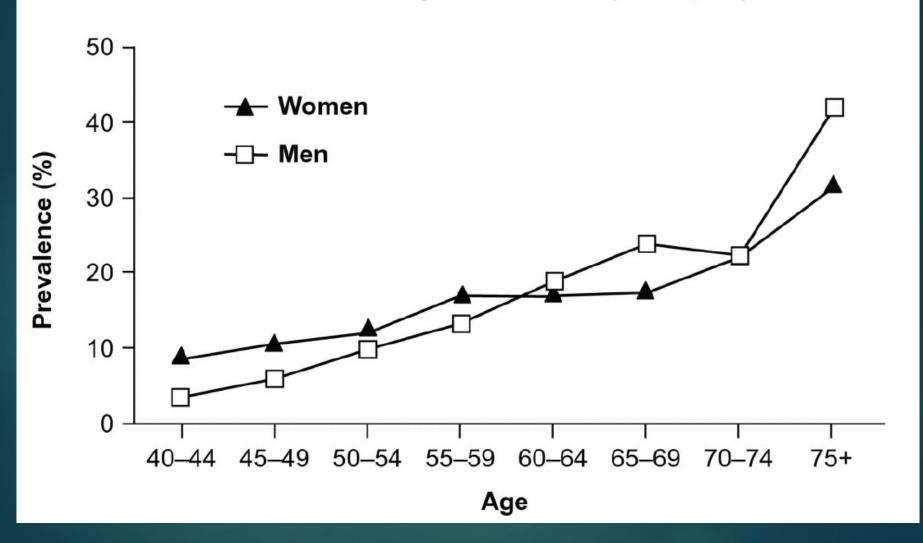
- Hesitancy
- Straining to void
- Intermittent stream
- Dribbling
- "Pis en deux"
- Incomplete emptying
- Post micturition dribble

## **Storage Dysfunction:**

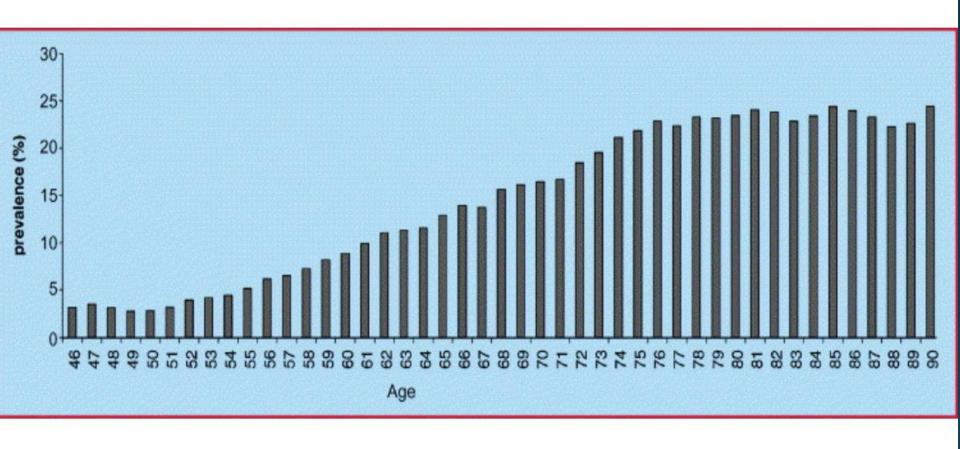
- Frequency
- Nocturia
- Urge
- Incontinence
  - Urge
  - Stress
  - mixed

## OAB symptoms and age

Random Sample 6 Countries (N = 16,776)



## Age specific prevalence of LUTS



Mixed LUTS (voiding & storage dysfunction)

## <u>Prevalence</u>

- 24% women and 15% men > 65 suffer UI
- ▶ 4-6 % >65 suffer faecal incontinence incidence is highest in Institutional care
- Huge cause of
  - ▶ Embarrassment and Social Isolation
  - ▶ Depression
  - ► Falls
  - ▶ Expense
  - Breakdown in care structures and need for residential care

# Promotion of Continence in Hospital – poor ?

<u>Fracture patients HIP n=3184 / Non-Hip n =5642</u>

#### Hips:

- ▶ 63 % assessed
- ▶ 41% reported a continence problem.

#### **Non Hip**

- ► :21% assessed
- ▶ 27% reported a problem
- Only half got any referral to continence service or intervention

Edwards R et al Maturitas 2011.

# UK National Audit of Continence Care

- ▶ 43% PCTs and 81% hospitals responded.
- ▶ Integrated Continence Services
  - ▶ 58% PCTs
  - ▶48% hospitals
  - ▶74% care homes

.....I fear we would be worse

# ISPGM surveys and developing a strategy for Incontinence

R COLLINS, R O CAOIMH, I NOONE, P HARKINS, M CONDON, D MCCARTAN, E MANNION ET AL.

## Noone et al. St Vincents University Hospital - 2007

- ► <u>Title:</u> "An Audit of the Prevalence of Incontinence in the Acute Hospital Setting"
- Type: Point prevalence study
- Methodology: verbal consent and patient Survey questionnaire
- Population: all acute hospital patients n =442
- Results:
  - ▶ 141(32%) were incontinent.
  - ▶ 80 (18%) were incontinent of urine, 61 (14%) were incontinent of faeces.
  - ▶ 5% patients had urinary catheters inserted.
  - ▶ 55% of the total patients were female with 32% patients >80 years.

## Condon et al. University Hospital Galway 2017

- ▶ <u>Title:</u> Urinary and Faecal Incontinence: Point Prevalence and Predictors in a University Hospital
- **Type**: Point prevalence cross sectional consecutive sample acute adult admissions
- Methodology: verbal consent-Interview & Review of medical & nursing notes -\_verbal consent ethics approval-

#### Results:

- 435 eligible inpatients. Median age was 72±23 years and 53% were male.
- ▶ median CFS score was 5±3 and CA-CCI 5±4.
- Overall Point prevalence of UI was 26% versus 11% for FI.
- > 85 35.2% and 21.1% respectively for UI and FI.
- Age was not an independent predictor.
- Frailty; CFS scores were independently associated with both UI (p=0.01) and FI (p=0.05)
- Patients on orthopaedic wards had highest prevalence
- Continence assessments were available for 11 (2%) patients.

## Harkins et al. Tallaght University Hospital 2018

- <u>Title:</u> A Hospital Wide Point Prevalence of Adult Urinary Incontinence and Audit of Continence Care.
- Type: Point prevalence study of UI
- Methodology: Audit medical & nursing notes adult in-patients hospital audit committee & ethics approval
- Results:
  - ▶ N= 358 point prevalence of 31% (112) urinary incontinence
  - equal numbers of males and females (n=56 each)
  - ▶ 6 patients (1.6%) had a continence care plan in place.
  - ▶ 40% with UI had diagnostic type with evidence of relevant investigations.
  - ▶ 26.7% were on medication used to treat urinary incontinence
  - ▶ 77% were on medications that could exacerbate urinary incontinence.

## McCartan et al: Tallaght University Hospital 2017

- <u>Title:</u> "Urinary Catheter Use and Care in the Acute Hospital Setting"
- <u>Type:</u> A Point Prevalence Study
- Methodology Hospital Audit of acute in patients medical & nursing notes review

#### Results:

- ▶ n= 386
- 14.5% (56/386) had an indwelling catheter 75% ≥65 years, and 64% were male.
- ▶ 86% were newly inserted.
- ▶ 14% (9/56) no indication recorded

#### other indications

- urinary retention 19.6% (neurological 7%)
- haemodynamic stabilisation protocol 12.5%.
- Only 14.5% new UC had a trial-without-catheter(TWOC) 4% had formal urology input.

## Summary Irish Hospital Audits

- ▶ 18-31% are incontinent of urine
- ▶ 11-14% are faecally incontinent
- 5-14% have urinary catheters in place 75% of which are newly inserted
- 1-2% of non-catheterised patients had a continence plan
- Majority if patents are older (2/3 over 75)

# What should happen in Continence care?

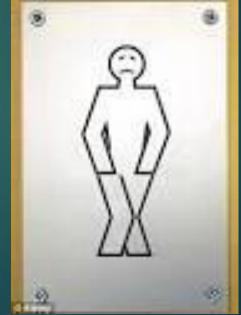
#### **Encourage patients**



- Prompt leaflets
- Awareness posters







# What should happen in Continence care?

#### **Encourage yourself to...**

- 'Listen' with your eyes
- 'Hear' with your nose
- Prompt and reassure patient
- Prompt and reassure carers where appropriate



Recognise the need

Pass urine
when
appropriate
place is
reached

Identify the correct place in which to void

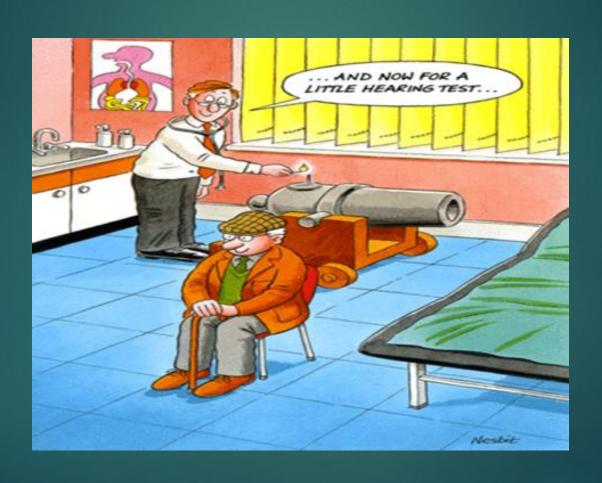
Hold on until the appropriate place is reached To remain Continent

Reach appropriate place



Clear signs on toilet doors

# Why is Incontinence Age Related



## Why is UI age related?

#### <u>Urological issues</u>

#### **Direct:**

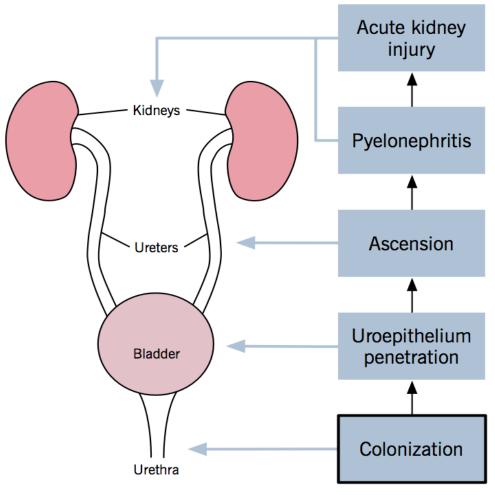
- Detrusor Over-activity
- Reduced bladder capacity
- Prostate enlargement
- ▶ Pelvic Floor weakness

#### **Indirect:**

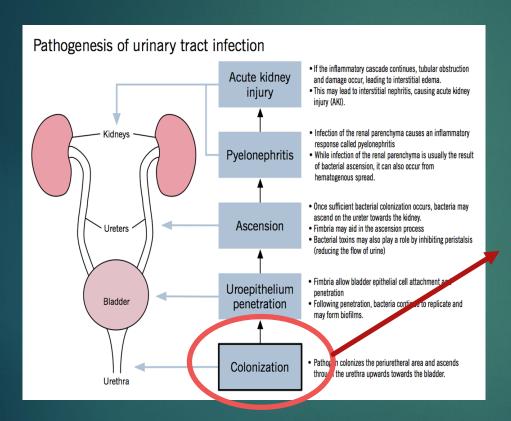
- Oestrogen deficiency
- Polypharmacy
- Immobiltiy
- Constipation

## Infection – stagnant water goes off

#### Pathogenesis of urinary tract infection



- If the inflammatory cascade continues, tubular obstruction and damage occur, leading to interstitial edema.
- This may lead to interstitial nephritis, causing acute kidney injury (AKI).
- Infection of the renal parenchyma causes an inflammatory response called pyelonephritis
- While infection of the renal parenchyma is usually the result of bacterial ascension, it can also occur from hematogenous spread.
- Once sufficient bacterial colonization occurs, bacteria may ascend on the ureter towards the kidney.
- Fimbria may aid in the ascension process
- Bacterial toxins may also play a role by inhibiting peristalsis (reducing the flow of urine)
- Fimbria allow bladder epithelial cell attachment and penetration
- Following penetration, bacteria continue to replicate and may form biofilms.
- Pathogen colonizes the periuretheral area and ascends through the urethra upwards towards the bladder.



#### ♀ Changes

- oestrogen level
- vaginal PH
- Normal flora

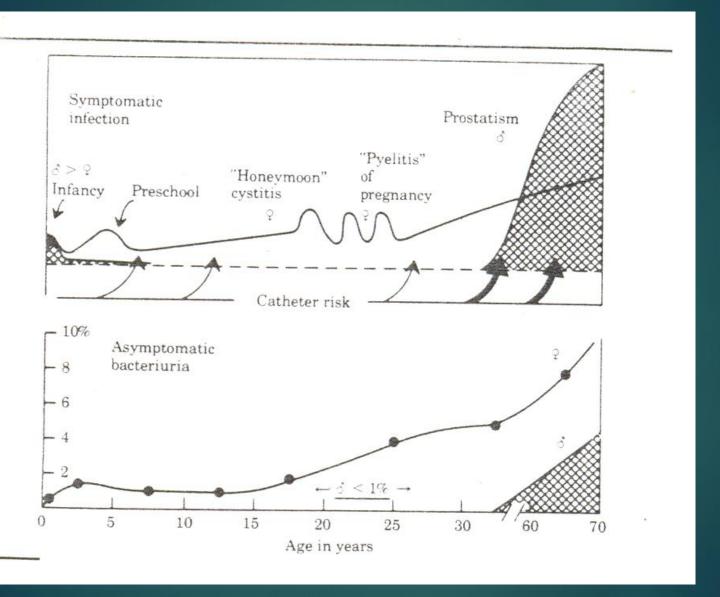
#### 3 changes:

Prostatic secretions

#### **Common factors**

- Poor hygiene
- Increased antibiotics
- Instrumentation
- Structural abnormalities

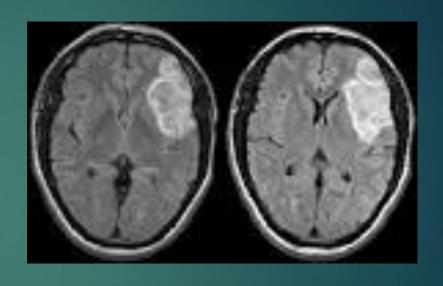
## Incidence of UTI with age



## Why is Incontinence Age related?

#### Neurological issues

- Agnosia
  - Dementia
  - ▶ Frontal lobe disease
  - ▶ Stroke



### Why is Incontinence Age related?

**►** Overactive Bladder

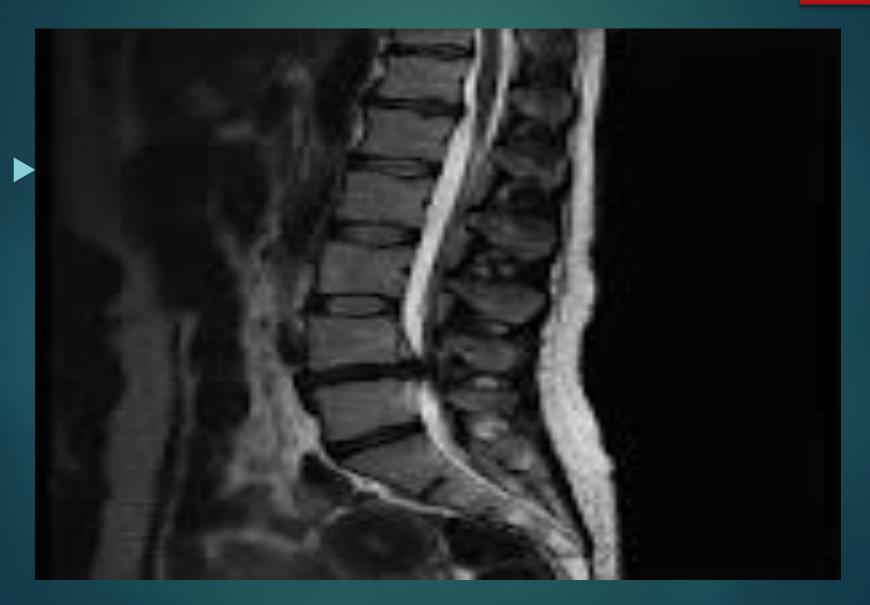


▶ Parkinson's disease

▶ Demyelination



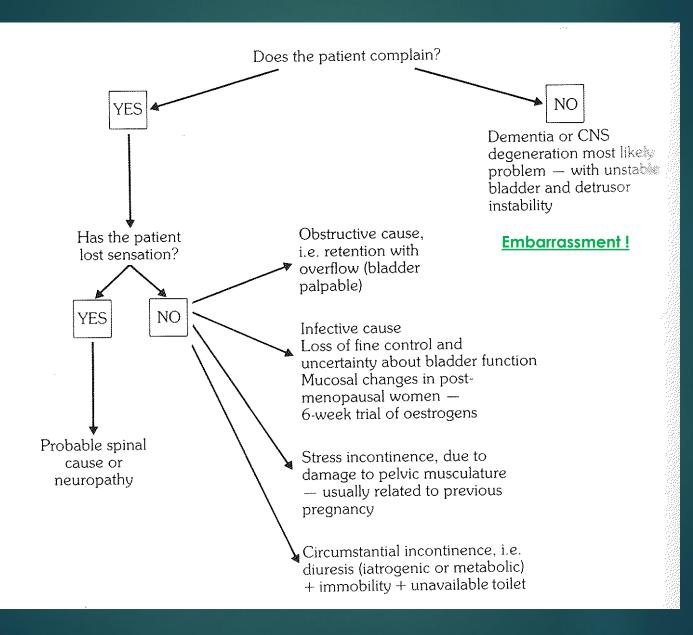
## Why is Incontinence Age related?



# other Age-Related Issues

- **▶** Poor Mobility
  - ▶ Stroke, Arthritis, Parkinson's etc.
- **constipation?** 
  - ▶ "Behind every full bladder lies a full rectum"!
- **►** Medication ?
  - ▶ diuretics,
  - paradoxical with anticholinergics,
- ► Is it due to heart failure?
  - Nocturia, Oedema , tachycardia, creps





## What should happen in Continence care ?...at the GP

#### Baseline examination:

- ► Palpate abdomen for bladder /constipation
- ► Evidence of heart failure?
- ▶ Neurological/ cognitive impairment ?
- ▶ ?? PR (But ONCE Please)

#### Baseline investigations:

- Dipstick and MSU
- ► FBC, Renal-liver function
- ► Glucose/ HbA1C / Calcium / PSA

#### Full History of symptoms -Continence-Symptom Diary

- Past urology and Obs/ Gynae history
  - ▶ Is it mainly stress or urge ?
  - ► Is it typical male LUTS pattern?
    - ▶ Older
    - Nocturia, hesitancy, poor stream, incomplete voiding dribbling
  - ▶ <u>Is it typical female stress pattern: ?</u>
    - Post partum
    - ► Multiparous, post menopausal
    - ► Hx instrumentation, repair surgery
    - sneezing, coughing, laughing. "I nearly wet myself "

# What should happen in Continence care of older people?....at the Hospital

#### A multidisciplinary assessment

- Always Geriatrician -comprehensive geriatric assessment
- Usually a Urologist
- Often a Gynaecologist
- \*Physiotherapist
- \*Nurse specialist
- \*Occupational therapist.

#### **Extra Investigations:**

- ▶ Post micturition bladder scan +/-Urodynamics
- Cystoscopy / renal ultrasound

# General overview of approaches to Urinary incontinence

Treatment is keyed to the type of incontinence.

#### Stress incontinence

- Surgery
- pelvic floor physiotherapy (KEGEL)
- medication 2<sup>nd</sup> Line (?? Topical oestrogens, Duloxetine)

#### Urge incontinence

- Changes in diet & behavioural modification
- pelvic-floor exercises
- Medications (anticholinergics/antimuscarinics, adrenergic agonists)
- Intravesical treatment (botunlinium)
- surgical intervention
- sacral nerve stimulation

# General overview of approaches to Urinary incontinence II

#### Mixed incontinence

- •- Anticholinergic /anti-muscarinic drugs
- ? surgery

#### Overflow incontinence

- alpha agonists & alpha reductase inhibitors (men)
- Catheterization regimen or diversion

#### Functional incontinence

Treatment of the underlying cause

# First Surgery needed is "Operation Transformation"

- Curiosity and empathy from US
- Weight loss
- Change diet factors that aggravate urge
  - Spicy foods e.g. cayenne pepper, mustard
  - Citrus fruits and juices
  - Chocolate
  - Physiotherapy (KEGEL) for all stress and mixed incontinence in women and post prostate surgery in men
  - <u>Behavioural modification</u> programme in Overactive Bladder

## Safety First - Primum Non Nocere

## Pharmacology Principles

#### **NICE-UK**

- 1.7.1 When offering drugs to treat OAB always take account of:
- existing conditions (e.g.poor bladder emptying)
- Existing meds –total anticholinergic load
- risk of adverse effects.
- 1.7.2 Before OAB drug treatment starts, discuss with patients
  - likelihood of success
  - common adverse effects, and
  - the frequency and route of administration
  - may not see the full benefits until for 4 weeks.

1.7.3 Prescribe the lowest recommended dose when starting a new OAB drug treatment.

1.7.4 If a woman's OAB drug treatment is effective and well-tolerated, do not change the dose or drug.

" IF it's not broke don't fix it"

## Pharmacology principles II

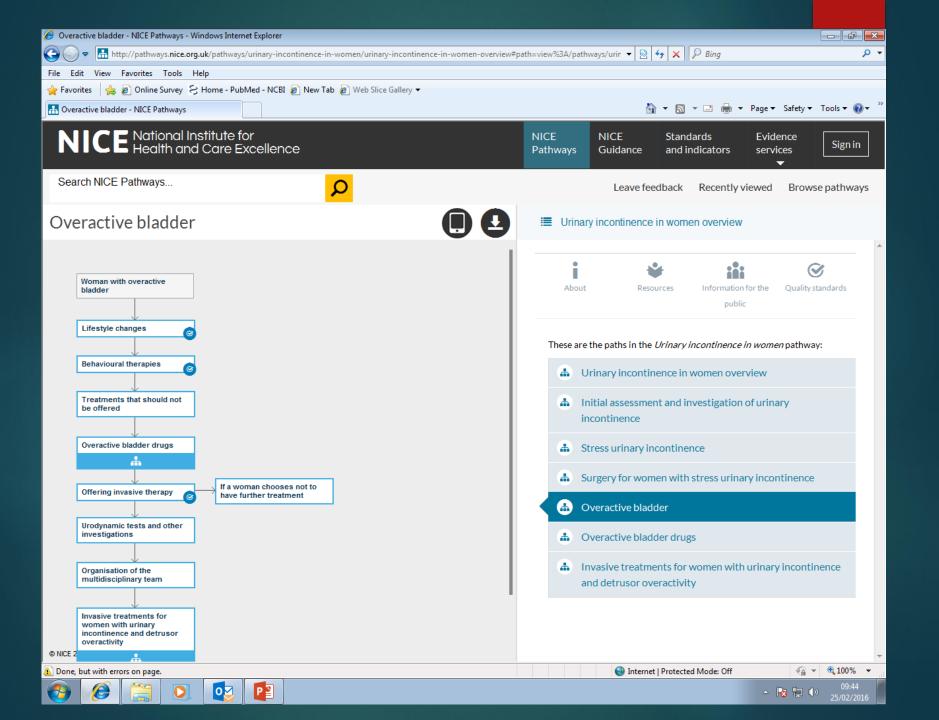
#### ACP – Ann Int Med 2014

- Clinicians should choose pharmacologic agents by:
  - ▶ Tolerability
  - Adverse effect profile
  - ► Ease of use
  - ► Cost of medication.

► What about Efficacy ??!!

#### Geriatric med principles

- It will likely work
- It will NOT make the person worse
- Will improve quality of life
- Easy to take
- Flexible 'go low and slow' dosing
- Won't break the bank



#### On-Line Resources

#### **British Geriatrics Society:**

http://www.bgs.org.uk/index.php/topresources/publicationfind/goodpractice/377-continenceBritish Geriatrics Society:

Advocates Integrated Continence services

#### **NICE Guidelines:**

http://pathways.nice.org.uk/pathways/urinaryincontinence-in-women

## Raise awareness in Staff





#### **Continence Awareness**

Urinary incontinence isn't a disease, it's a symptom.

Ask yourself the following questions each time you empty a catheter, bring a commode, or attend to the personal care of each patient...

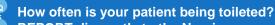


Does my patient really need catheterisation?



Do they really need incontinent wear?

Is the patients incontinent wear the correct type, size?



REPORT discreetly to the Nursing
or Medical staff





How do you know what's Normal?

#### A Healthy Bladder

- ✓ Does not leak, you feel when it is full and you have time to go to the toilet
- ✓ Can hold to up 400-600mls
- ✓ Empties between four to eight times a day
- ✓ Can wake you up once a night to go to the toilet (twice if older)
- ✓ Completely empties each time

#### A Healthy Bladder

- XLeaks urine with coughing/sneezing/lifting
- XCan only hold 300mls or less
- XEmpties more than eight times a day
- XHas you up more than twice during the night
- XDoes not completely empty after passing urine
- XBurns or stings when passing urine
- XGives a strong urge to get to the toilet and you may not always make it in time

## Empower patients

	Please return this card to your Nurse or Doctor if the answer is Yes to any of these questions. Do you;
Р	Plan your routine around the nearest toilet? □
E	<b>E</b> mpty your bladder completely when you go to the toilet? □
R	<b>R</b> ush to use the toilet or leak before you get there? □
S	<b>S</b> oil your underwear? □
0	Have you <b>O</b> bserved leaking when you; □ Lift something heavy? Sneeze, cough, laugh? Get up suddenly or change position?
N	Get up at <u>Night</u> to go to the toilet?

### Remind Us All

#### **Continence Care**

Talk to us in confidence



Continence Care at TUH is all about the three C's

1

2

3

#### Compassion

Treating the patient with dignity and sensitivity

Communication

Effectively enable the patient to get their needs met Commitment

Managing individual needs

## A Charter for Continence?

- 1. All patients have the right to have their continence maintained in hospital & community.
- 2. Hospitals have duty to provide clean toileting facilities with appropriate privacy suitable for all ages and all levels of physical and cognitive impairment.
- 3. Patients needing help to toilet are entitled to have physical assistance provided in a sensitive and private manner that maintains their dignity and aims to have them using normal toileting facilities
- 4. Loss of continence (pre-existing admission or new) requires a multidisciplinary and often interdisciplinary assessment to which patients are entitled.

### Charter for continence

- 5. Bedside toileting by pan or commode should be a last resort of toileting in patient care and not dictated by staffing levels .
- 6. Use of continence pads on patients should not be routine and should only be put on patients after careful nursing review and with patients or their carers involved in the decision
- 7. Insertion and use of urinary catheters should only be for documented medical reasons and with the consent of patients or their carers. Catheters should have a daily care plan and be removed as soon as possible.

## To achieve proper continence care we need....

- At least one continence nurse specialist in each acute hospital and every CHO
- Appropriate toilets and continence aids in our hospitals
- Making continence a core part of nursing plans again
- Interdisciplinary continence clinics for each acute hospital and CHO
- Appropriate level (? Mandatory) training for all doctors at BST and SPR level and at RGN/ CNM level in continence care

## Next steps....?

- Overview paper of Irish audits of incontinence in preparation
- Media campaign ? Agree suggested charter
- Liaise with Institute Obs and Gynae / Irish urology society
- Address training issues with RCPI / RCSI and training within geriatric medicine

#### **A New PANTS For Continence!**



P

A

N

Т

S

Proactive about continence

Awareness of what it is

**N**othing to be ashamed of

Talk to your patient

**S**olve the problem

