

RE-SCHEDULED

# Preventing moisture-associated skin damage and promoting patient wellbeing



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# Learning objectives

1. Demonstrate an understanding of why a patient may become incontinent
2. Look at what happens when the skin is compromised by incontinence, especially in the elderly population
3. Learn how we assess a patient with moisture-associated skin damage (MASD) — is it pressure or a moisture lesion?
4. Understand why we should use evidence-based practice in the treatment and prevention of MASD

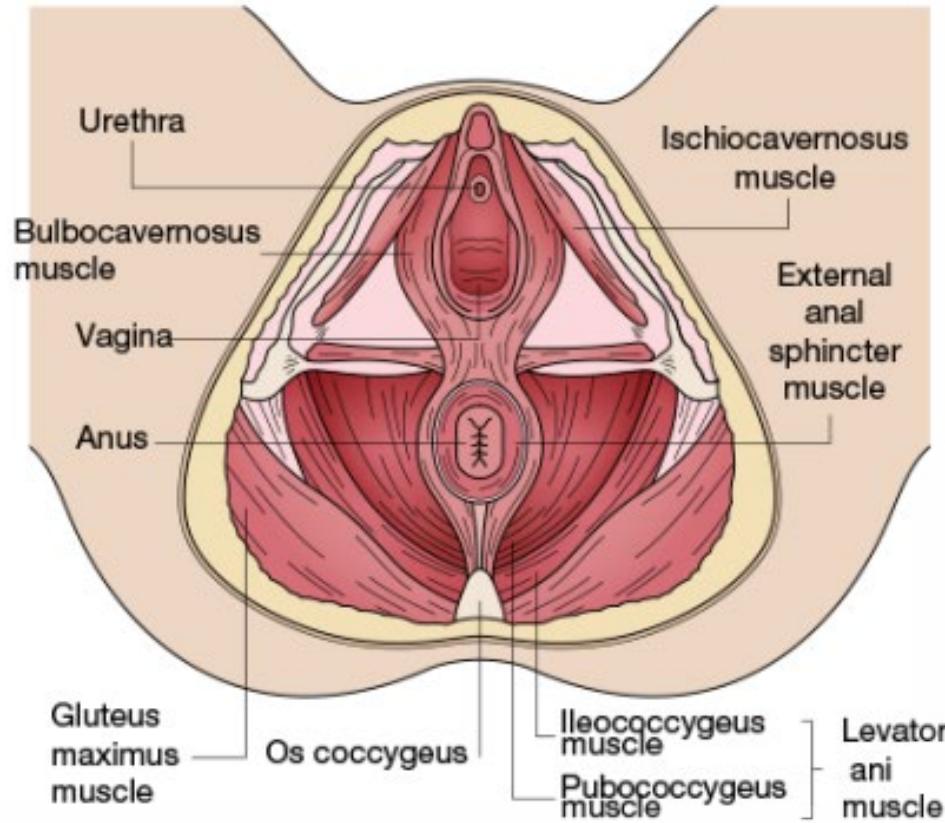
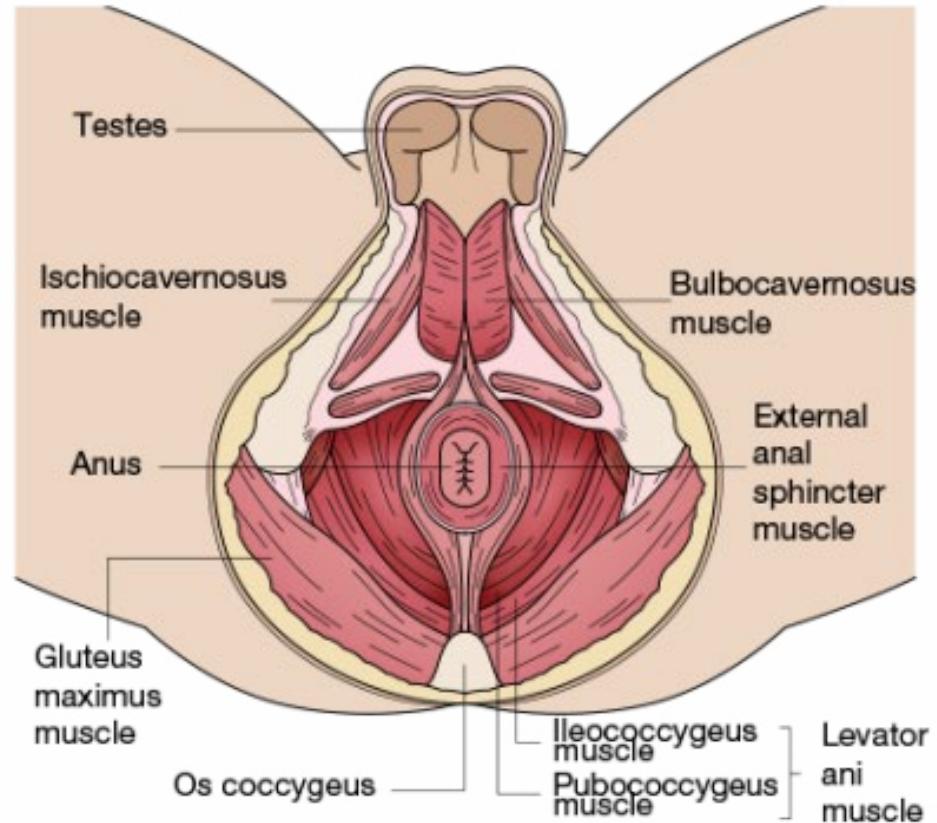
# Many types of incontinence

Common types of incontinence include:

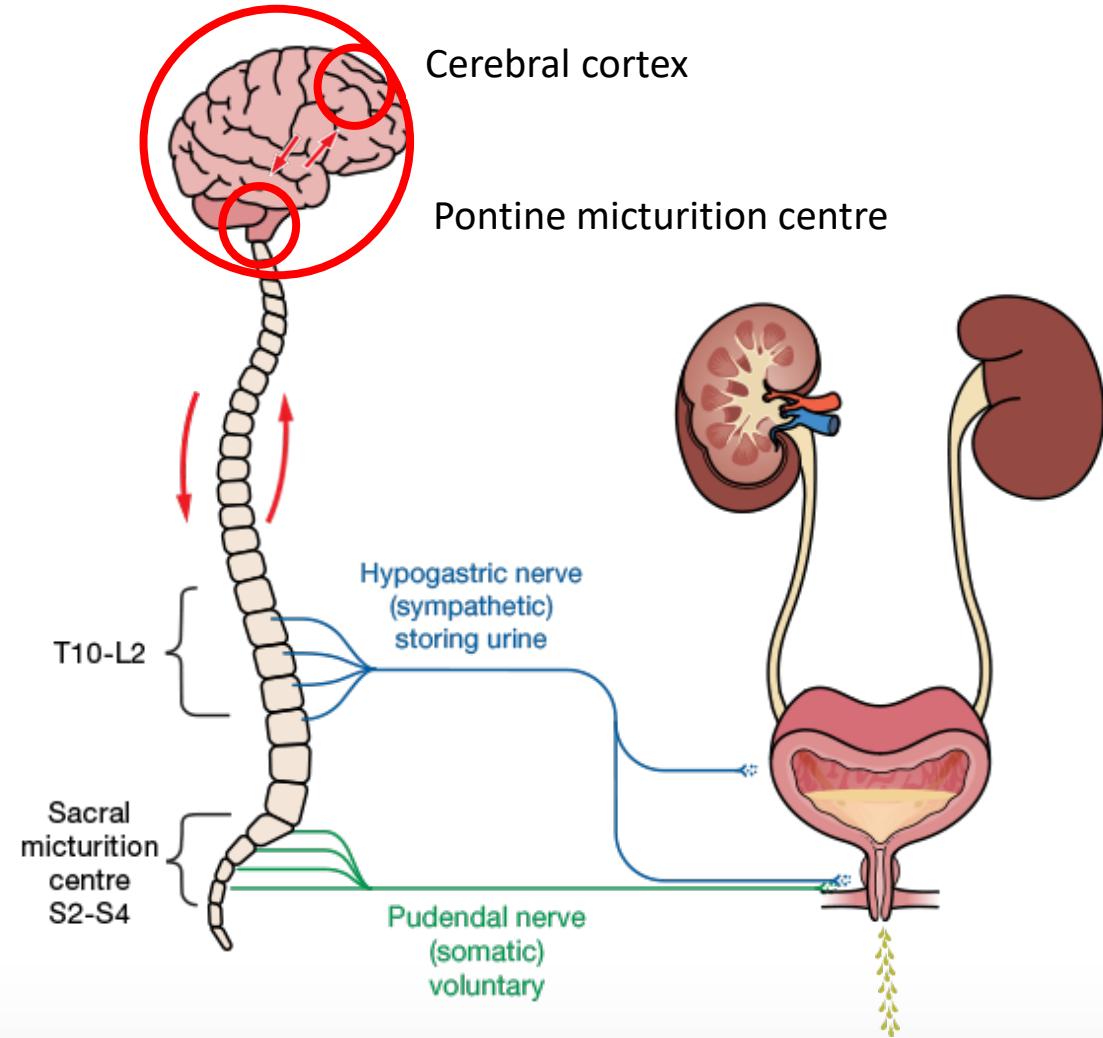
- Stress
- Urge
- Overactive bladder
- Frequency
- Mixed
- Functional
- Neurogenic
- Nocturnal
- Overflow dribble
- Post micturition dribble
- Faecal



# Anatomy and physiology: muscles of the urinary system

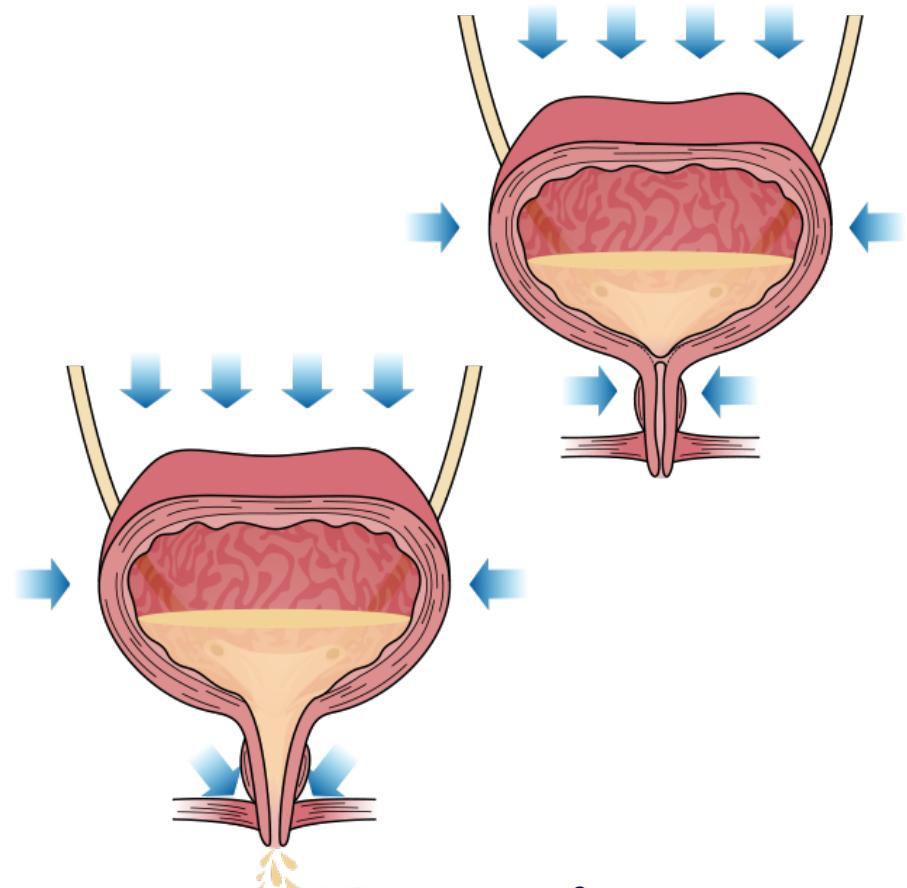


# Anatomy and physiology: nervous system



# What is stress urinary incontinence?

- Stress urinary incontinence:
  - Is defined as 'involuntary leakage during effort or exertion, or on sneezing or coughing'<sup>1</sup>
  - Occurs when the important support for the urinary tract and bladder is not functioning as it should
  - Is the most common form of urinary incontinence in women
  - Men can also be affected by stress urinary incontinence, but this is very rare

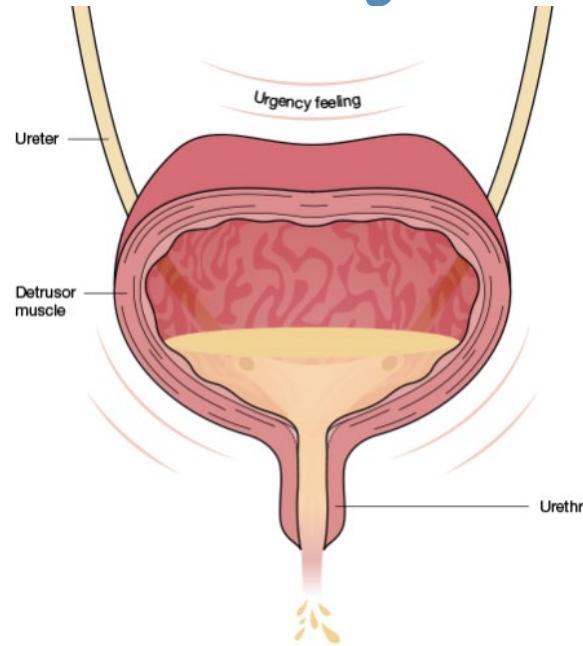


Ref. 1. International Continence Society (ICS) 2015

# What is urge urinary incontinence?

- Urge urinary incontinence is 'the involuntary leakage of urine accompanied by, or immediately preceded by, urgency of micturition'
- A sudden and compelling desire to urinate that cannot be deferred
- In urge incontinence, there is detrusor instability
- This may be idiopathic or secondary to neurological problems, such as stroke, Parkinson's disease, multiple sclerosis, dementia or spinal cord injury
- It can sometimes be caused by local irritation due to infection or bladder stones

# What is urge urinary incontinence?



## Falls

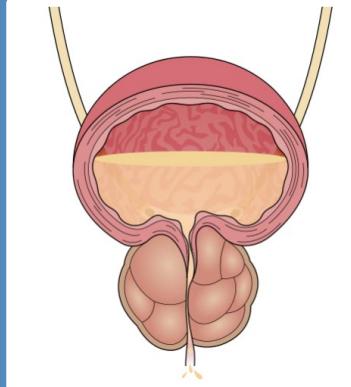
Falls are predominantly associated with the symptoms of an overactive bladder rather than those of stress incontinence

Continence is a significant risk factor that should be considered in the falls management plan

# Causes of urge urinary incontinence?



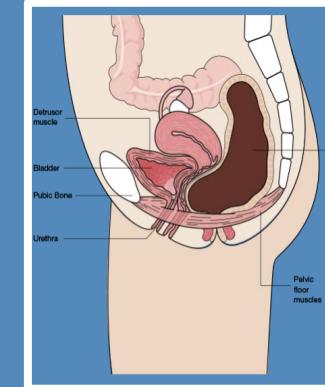
Irritants



Bladder obstruction



Medication



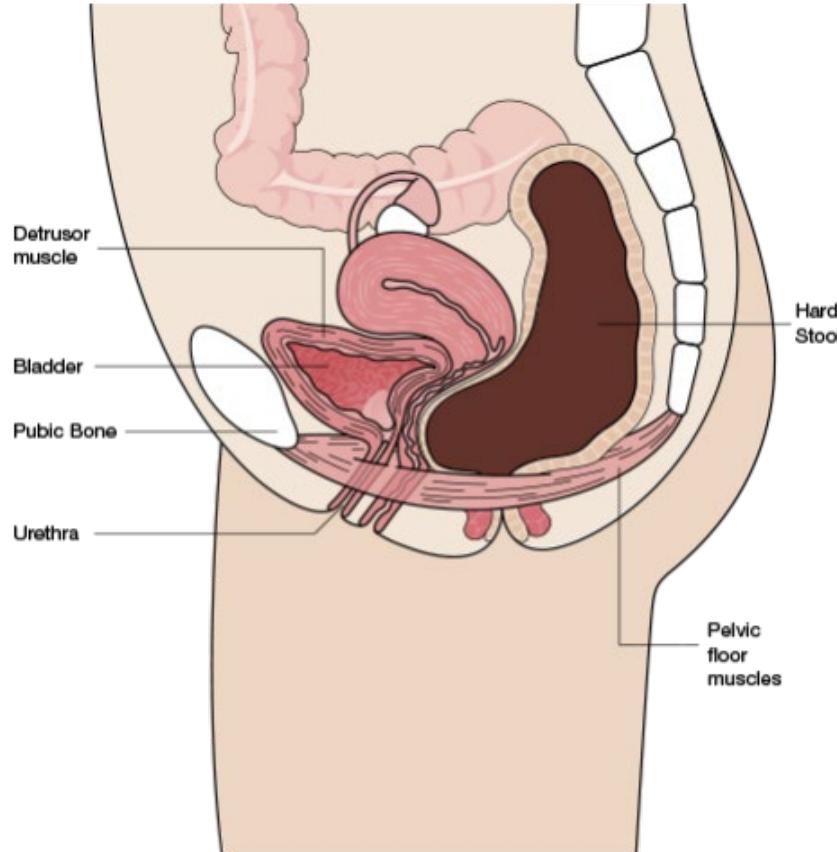
Constipation



Fluid intake

# Causes of faecal incontinence

- Constipation
- Severe diarrhoea
- Faecal impaction
- Bowel surgery
- Neuropathic disorders
- Existing conditions
- Bowel conditions, e.g. irritable bowel syndrome (IBS)/Crohn's disease
- Pelvic floor weakness
- Anal sphincter damage caused by childbirth



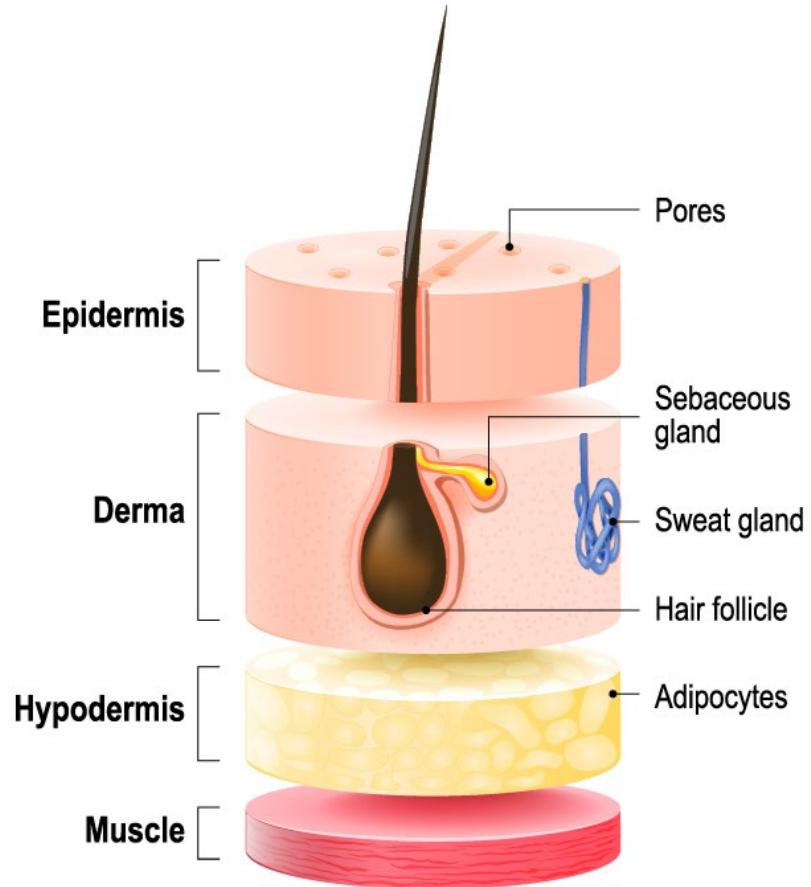
# Incontinence and ageing

- Some of the common contributory factors to incontinence in the elderly include:
  - Weakened muscles
  - Lack of oestrogen
  - Medication
  - Low blood pressure
  - Sensory nerve pathway 'wear down'
  - Difficulties controlling voiding
  - Decreased bladder capacity
  - Nocturia
  - Constipation
  - Functional incontinence
  - Toileting habits



# Overview of the skin

- Skin is the largest organ of the human body covering an area of 1.5–2m<sup>2</sup>
- 33% of water in the body is stored in the skin
- Healthy skin function is essential for overall physical health
- The skin is made up of seven layers, which include:
  - Epidermis
  - Dermis
  - Subcutaneous layer



# Overview of the skin

Three main functions:

- Protection:
  - Acts as a barrier to external contaminants
- Regulation:
  - Temperature
  - Synthesis of vitamin D
- Sensation:
  - Heat/cold
  - Pressure
  - Touch
  - Pain

# The older person's skin

- As we age, there will be an estimated 20% reduction in the thickness of the dermis, which results in a paper-thin appearance
- The functions of the skin are affected in the following ways:
  - Reduction of blood vessels
  - Less efficient protective immune system
  - Less ability to regenerate
  - Less ability to control temperature and moisture retention (dryness)

# The older person's skin

- Epidermis gradually becomes thinner
- Skin is more susceptible to damage from mild, mechanical injury forces, such as moisture, friction and trauma
- Incontinence can be a problem associated with old age. As we age the risk of comorbidities increases, resulting in:
  - Medication regimens
  - Rate of healing will be slower
  - Potential dehydration
  - Altering of the normal bacterial flora of the skin

# How does moisture affect the skin?

- Increases the permeability of the subcutaneous layer
- Can cause Inflammation
- Increases the pH
- Stratum-corneum changes

# How does moisture affect the skin?

- Maceration of the skin may be due to the following factors:
  - Incontinence-associated dermatitis (IAD)
  - Moisture and friction
  - Sweating (e.g. intertriginous dermatitis)

# What is moisture-associated skin damage (MASD)

- IAD is also known as perineal dermatitis, nappy rash and many other names
- It is included within a broader group of skin conditions that are referred to as moisture-associated skin damage (MASD)
- IAD is the preferred term, as it distinguishes skin problems arising directly from contact with urine and/or faeces

# Incontinence-associated dermatitis (IAD)

- A hydrolipid film covers the top of the skin, formed by lipids and water
- The raised pH around the affected area increases protease and lipase activity, causing skin irritation
- Dermatitis excoriation is seen in incontinent patients
- Episodes of incontinence combined with bacteria and enzymatic activity leads to skin breakdown
- Consideration should be given to the use of urinary and faecal collection systems to protect skin integrity

# Moisture or friction

- Friction exists at the skin's surface
- Hydration level of the skin increases friction and sticking to the surface:
  - High humidity
  - Liquid moisture
- Friction may lead to harmful shear stress

# Skin assessment: is it pressure or moisture damage?

- A moisture lesion and a pressure ulcer may co-exist
- Where IAD/moisture lesions are accompanied by pressure, this must be reported as a pressure ulcer
- The two areas of moisture and pressure need to be addressed as part of the patient care plan

# Is it pressure or moisture damage?



# Pressure or moisture damage

	<b>Pressure ulcer</b>	<b>Moisture lesion</b>
Causation	Usually pressure and/or shear are present	Usually moisture is present
Location	More than likely over bony prominences	Less likely over bony prominences
Shape and edge	Usually distinct edging and shape	Usually diffuse, are rarely more than superficial
Depth	Pressure ulcers can be superficial or deep	Superficial
Necrosis	May be present	Necrosis is never present

# Assessment tools

- Aetiology of moisture lesions can be complex and multifactorial
- Assessment tools that can be used to identify moisture lesions include:
  - Perineal Assessment Tool (Nix, 2002)
  - Perirectal Skin Assessment Tool (Storer-Brown, 1993)
  - IAD Skin Condition Assessment Tool (Kennedy et al, 1996)
  - Incontinence-associated dermatitis and its severity (IADS) instrument (Borchert et al, 2010)
  - National Association of Tissue Viability Nurses Scotland's skin excoriation tool (NATVNS, 2008)

# How to manage incontinence-associated moisture

- Patients with incontinence should undergo full holistic nursing assessment
- This should include questions regarding bladder and bowel function habit
- Incontinence is not an inevitable consequence of old age and should be treated whenever possible
- Skin should be kept clean, dry and well hydrated
- Patients should be encouraged to drink regularly to maintain hydration, and to reduce the risk of constipation as well as the concentration of urine
- When conducting continence assessments refer to guidelines, such as:
  - National Institute for Health and Care Excellence (NICE)
  - Local policies

# How to manage incontinence-associated moisture

- All individuals should have their skin assessed as part of a holistic assessment
- The normal bacterial flora of the skin is altered (with incontinence), allowing colonisation with more pathogenic species
- Water and pH balanced products
- Barrier products as skin protectant as trust policies and pathways
- Soft, pre-moistened washcloths, impregnated with dimethicone to protect skin are now available and widely used

# Best practice for patients with incontinence and moisture lesions

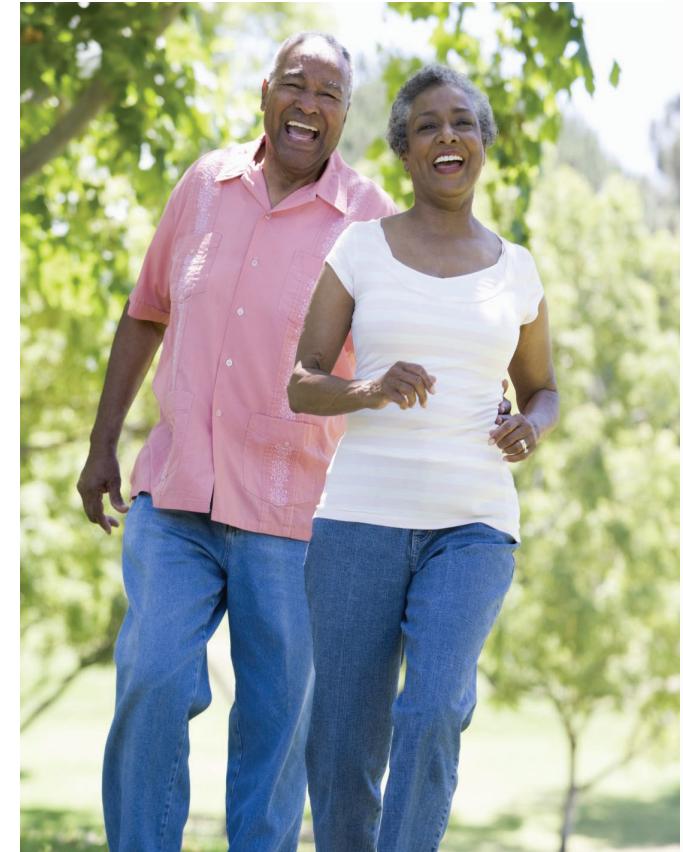
- Reassessment should be regularly undertaken depending upon the patient's condition
- Changes in incontinence (pattern, cleansing regimen and continence aids used) can contribute to the development of skin breakdown
- Advice on assessment and appropriate products to aid management should be sought from your local continence advisor
- Nutritional assessment should be included in the holistic assessment for at-risk patients
- Frequent skin inspections should be done to identify early signs of skin damage

# Treatments and interventions for functional incontinence

- Management of functional incontinence focuses on having strategies in place to reduce the likelihood of incontinence occurring. Strategies include doing things like:
  - Changing the environment to make toilet access easier
  - Putting clear toilet signage in place
  - Use of toileting aids and equipment
  - Wearing clothing that is easy to remove and put back on
  - Other management devices, for example, urinals and sheaths

# Treatments for faecal incontinence

- The most common cause of faecal incontinence is constipation
- Treatments for constipation include:
  - Adjustment of constipating medication
  - Increase in dietary fibre
  - Ensure appropriate fluid intake
  - Gentle exercise

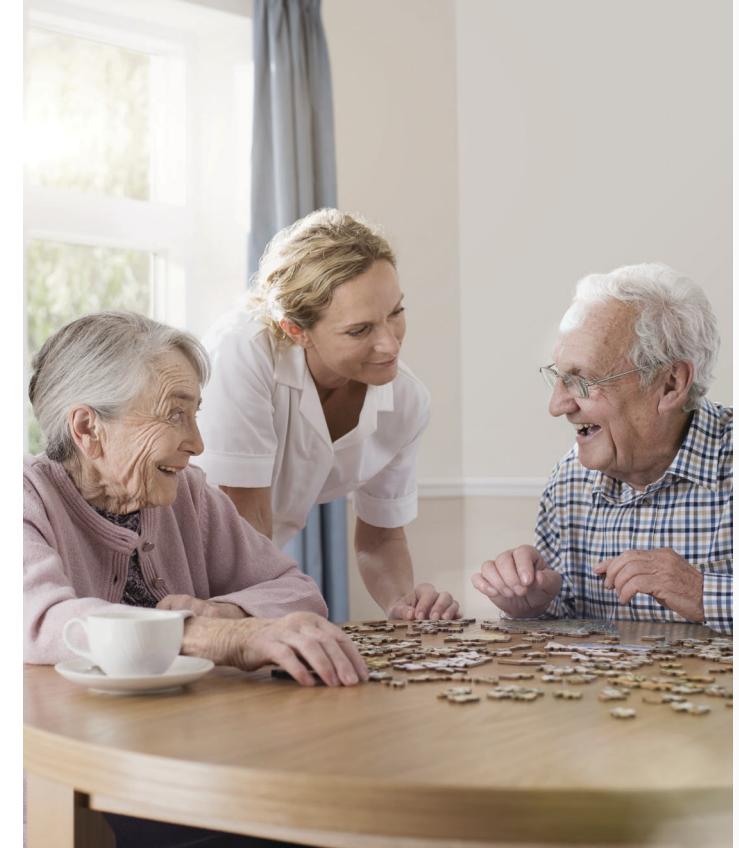


# Treatments of faecal incontinence

- Gastrocolic reflex
- Oral laxatives if dietary measures are ineffective
- Bulk forming as an initial treatment
- Osmotic laxative if stools remain hard
- Stimulant if stools are soft, but the patient still cannot empty their bowel

# Individualised product assessment

- Following continence assessment, if a containment product is considered to be the best option, a continence product assessment should take place
- Assessments should take into account:
  - Gender
  - Type of incontinence
  - Degree of dementia
  - Toileting
  - Pad-changing assistance
  - Sensitive skin
  - Leakage occurrence
  - Hip/waist measurement
  - Product in use



# Clinical evidence – Harries et al, 2016

- **Title:** Non-rinse skin cleansers: the way forward in preventing incontinence-related moisture lesions?
- **Aim:** University Hospitals Birmingham identified that in the current climate of austerity and efficiency savings, use of a non-rinse cleanser is being randomly rationed. Objective was to determine if introducing smaller tubes of a non-rinse cleanser with targeted education would improve usage and ultimately improve the skin of incontinent patients
- **Method:** five clinical areas, randomised into two groups.
  - Group 1: Three clinical areas given targeted education and smaller skin cleanser
  - Group 2: Two areas acted as control groups, one having targeted education only, remaining area had no education or new sized tubes
- Incidence of incontinence-associated moisture lesions from each clinical area monitored for 13 weeks pre- and post-study period

# Clinical evidence – Harries et al, 2016

- **Results:** The in-depth study confirmed a trend in staff committing to an ethos of prudence, which in turn compromised the use of the most effective treatment and prevention of incontinence-associated moisture lesions
- Ability of trust staff to recognise and respond to a change in practice and the responsiveness of a commercial provider to proposed new methodology resulted in significant reduction in incontinence-associated moisture lesions across the trust
- The three clinical areas in the study (group 1) demonstrated a 70–76.9% reduction in moisture lesion incidence, compared to 8.3–13.6% reduction in the control group (two areas)

# Clinical evidence – Harries et al, 2016

- **Conclusion:** results strongly suggest that a reduction in incontinence-associated moisture lesions can be achieved by a simple change in nursing regime:
  - Combination of solid education provision, alongside more appropriate sized product, demonstrated significant patient benefit, greater adherence in practice and a reduction in waste
  - Integrity of patients' tissue was preserved, staff satisfied with their input and patient progress
  - Outcomes of this study will have an impact on patient benefit and on the efficiency for trusts, resulting in greater patient satisfaction and more appropriate use of limited resources

# Treatment options — skin care

## TENA Wash Cream

- Creamy 3-in-1 formula to promote skin health
- Gently cares for and protects vulnerable skin of elderly patients
- For frequent perineal skin care in incontinent patients, when changing absorbent products (can be used on full body)
- Ideal for cleansing and hydrating even delicate and fragile skin, no rinsing required
- Dermatologically tested
- Helps maintain the skin's natural pH and control odour
- Leaves skin over 7x more moisturised than soap and water<sup>1</sup>



1) Data on file

# Treatment options – skin barriers

## Cutimed® PROTECT – available in cream, film and spray variants

- Provides a long-lasting protective barrier against
  - Incontinence
  - Exudate
  - Water loss from skin
  - Damage to peri-wound margins
- Cutimed® PROTECT Spray and Foam Applicator offer effective support in:
  - Re-establishing and regenerating the skin's barrier function
  - Providing a protective barrier for up to 96 hours
- Cutimed® PROTECT Cream protects dry, chafed, red or irritated skin by:
  - Moisturising and providing a long-lasting barrier

# Treatment options – pads

## TENA ProSkin innovations

New and improved product range to be launched from August 2019. Please contact [hcmarketing@essity.com](mailto:hcmarketing@essity.com) for further information.

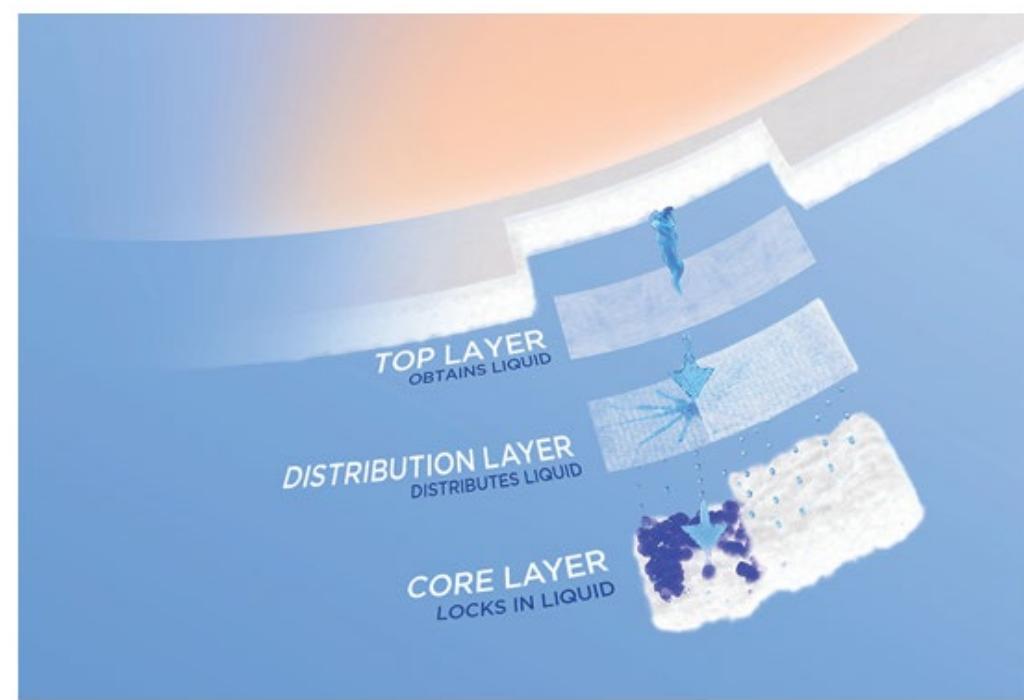


# Treatment options – pads

## TENA FeelDry Advanced™

Helps manage skin wetness by reducing moisture levels

Applies to all TENA ProSkin incontinence absorbing products:  
Stands for fast acquisition into the product effectively locking in liquid.  
Allowing the skin to remain at optimum moisture levels

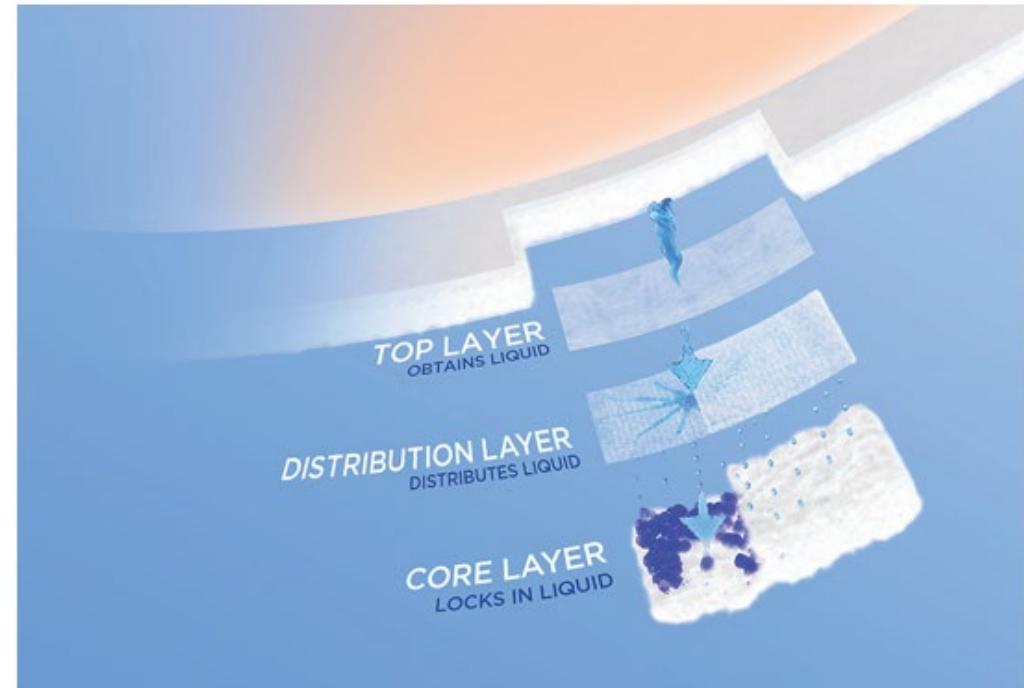


# Treatment options – pads

## TENA FeelDry Advanced™

Southampton University repeated the study on a panel of over-65 respondents, substantiated by:

- **Laboratory analysis**
  - Acquisition, rewet and run-off tests
- **Skin moisture test**
  - Moisture and vapour levels on the skin measured
- **Preference tests**
  - Patients prefer TENA products in use vs key competitors<sup>1</sup>



<sup>1</sup> Data on file Preference test report TENA Flex. August 2017, Poland/Germany n=322

## TENA ProSkin key features



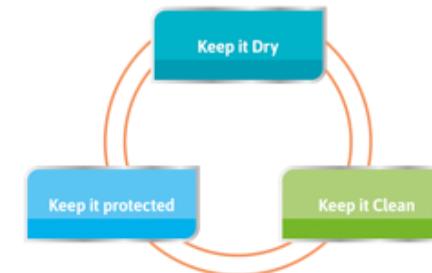
TENA ProSkin triple protection for dryness, softness and leakage security to help maintain natural skin health.



For fast absorption to keep the skin dry to maintain a natural skin balance.



A third-party endorser for an independent dermatological accreditation.



TENA ProSkin skin health solution. Designed to help take care of elderly, fragile skin affected by incontinence.



TENA ProSkin absorbent and skin care products are dermatologically tested and independently verified.

# Summary

- As we age, there will be an estimated 20% reduction in the thickness of the dermis, which results in a paper-thin appearance
- The epidermis gradually becomes thinner, making the skin more susceptible to damage from mechanical injury forces such as moisture, friction and trauma
- Skin damage through moisture can be referred to as either:
  - Maceration: this is due to water remaining in contact with the skin or the surface of the wound for extended periods
  - Excoriation: this is where the contents of the moisture removes the top layer of the skin (enzymes, plasma proteins, bacteria, faeces and urine)
- A structured skin care regimen should include three elements of care: cleanse, moisturise and protect

# Summary

- Reassessment should be regularly undertaken depending upon
  - Patient's condition
  - Changes in incontinence (pattern, cleansing regimen and continence aids used), as these factors can contribute to the development of skin breakdown
- A moisture lesion and pressure ulcer may exist in the same area
- Where incontinence associated-dermatitis/moisture lesions are accompanied by pressure, this must be reported as a **pressure ulcer**
- Episodes of incontinence make skin susceptible to breakdown, leading to moisture lesions and/or pressure ulcers

# TENA Wash Cream – Free Sample

- The TENA team is donating up to 50 free 20ml sample bottles of the TENA Wash Cream
- The no-rinse, 3-in-1 formula gently cleanses and protects and is particularly suitable for delicate elderly skin — get a free sample by emailing:
- Email [concierge.service@Essity.com](mailto:concierge.service@Essity.com) with your name and work address and we will send it out to you

# Essity Academies

- Free education and training is available via Essity's academies
- 31 modules available including:
  - Anatomy and physiology of skin
  - Factors affecting wound healing
  - Infection management
  - Surgical site infection
  - Litigation and the law and the NHS
  - Improving the assessment of wounds



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