

STOMAS AND SKIN INTEGRITY



Lawrence Mutale RN DipNEd PG Cert STN MN (Hons)

Clinical Nurse Specialist – GI Cancer & Stomal Therapy

MidCentral District Health Board

Palmerston North.

Outcomes

- ▶ MidCentral DHB area
- ▶ Colorectal surgery and stoma formation
- ▶ Types of stomas
- ▶ Psychological aspects
- ▶ Peristomal skin integrity
- ▶ Complications involving stomas and skin integrity
- ▶ Peristomal skin care: General principles
- ▶ Conclusion

Back to the basics

- Basics: 3 different types of stomas
- ▶ About 75% of those living with a stoma will report peristomal skin issues at some point in their lives.
- ▶ Maintaining skin integrity is a basic skill that ensures good stoma management.
- ▶ Skin integrity is essential for the normal usage of a stoma appliance.
- ▶ Adaptation to life with a stoma depends to a large extent on the health of the peristomal skin.
- ▶ There is little published on the prevalence, prevention or management of stoma skin problems.
- ▶ Failure to correct stoma-related problems can have significant negative effects on patients' psychosocial well-being.

Smith A.J., Lyon C.C and Hart C.A. (2002).

A photograph of the Palmerston North Hospital, a modern multi-story white building with a prominent curved glass entrance canopy. A red car is parked on the left and a silver car on the right of the entrance. A sign for 'Hospital Health Pharmacy' is visible on the right side of the building. The sky is blue with some clouds.

Palmerston North Hospital, New Zealand

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Colorectal surgery & formation of a Stoma

Challenges

- Medical diagnosis (often life threatening)
- A major surgical procedure
- The impact of a stoma: Privacy issues
- Most people feel that bodily elimination is a private function, best managed in one's own home
- The learning of new skills needed to cope with pouching this incontinent method of elimination
- The impact this has on body image and lifestyle.
- Excretion and excretory behaviour are rigidly controlled in each culture and in each society

Persson, E, 2005.

Formation of a Stoma

A stoma is fashioned surgically by bringing a segment of the small or large intestine (bowel) onto the surface of the abdomen for the excretion of faecal waste or urine.

Stoma comes from a Greek word for “mouth or opening.”

This segment is then everted exposing the mucosal surface.

- ▶ It has no Sphincter
- ▶ It is red and moist
- ▶ It is not Painful
- ▶ It may bleed easily

A stoma can be temporary or permanent.

Types of Stomas

- Ileostomy: Small intestine (Ileum)
- Colostomy: Large intestine (bowel)
- Urostomy / ileal conduit: Ileum (bladder removed).

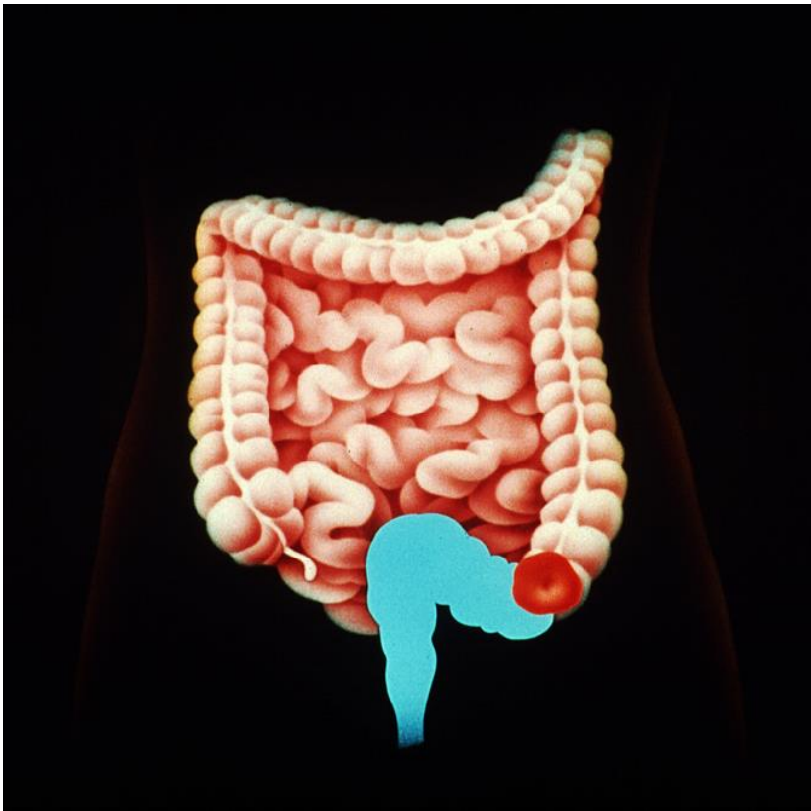
Hollister, 2010.

The “normal” Loop Stoma

- ▶ Stoma supporting rod

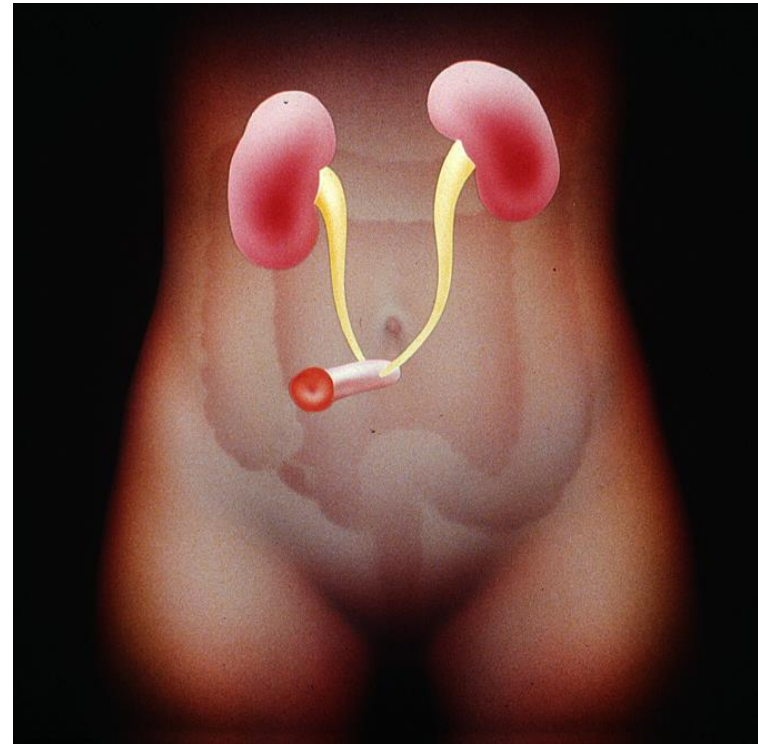


The “normal” End Stoma



Urostomy (Ileal conduit)

- ▶ A Urostomy or Ileal conduit is a surgically created opening on the abdomen that detours, or diverts urine away from a diseased or defective bladder.



Stoma Appliances (Pouches)

Drainable
pouches



Closed pouches



Urostomy
pouches



Psychological Aspects

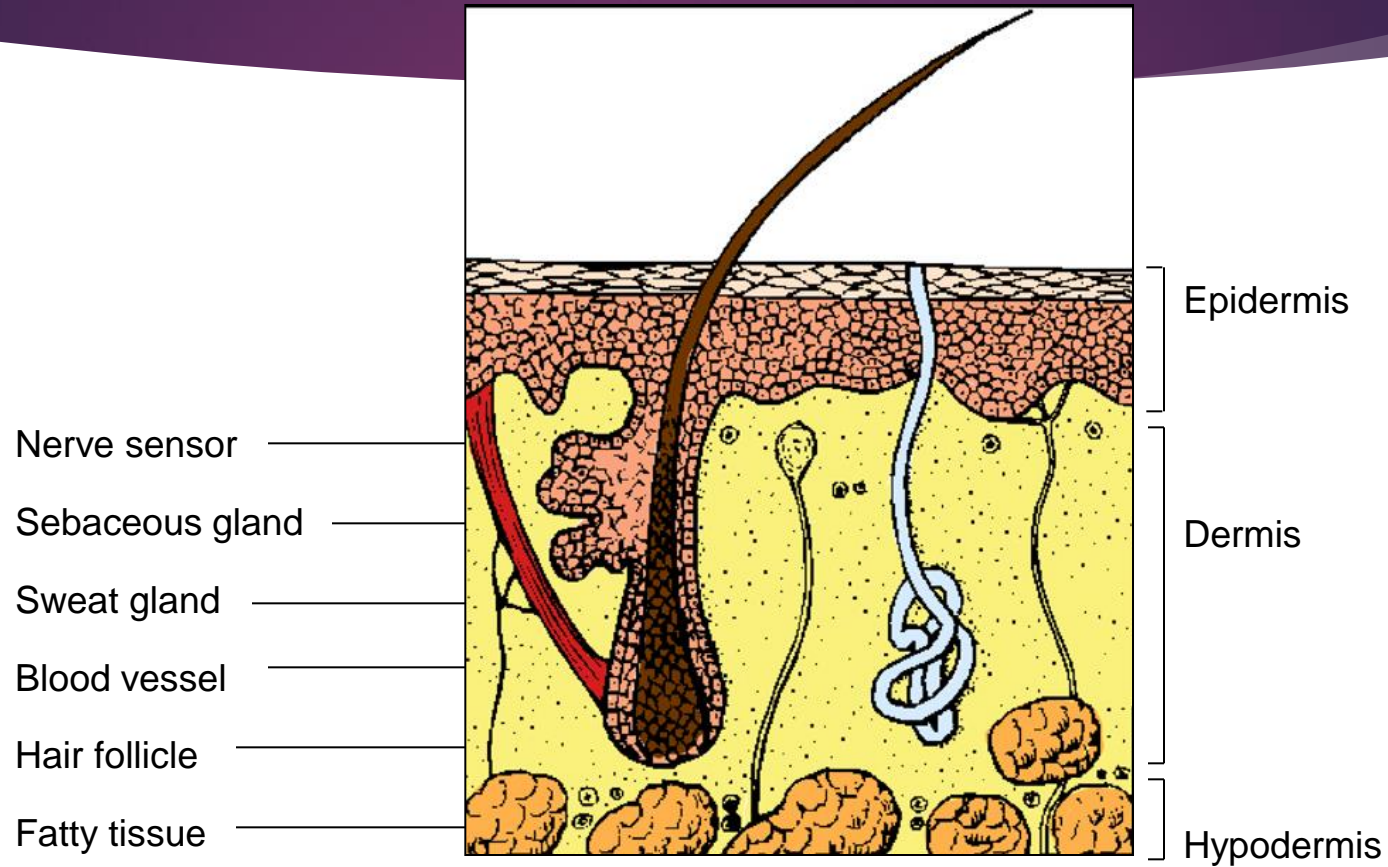
- Having a stoma is a major event and patients can become very anxious and depressed.
- Quality of life can deteriorate for patients following stoma procedure.
- Holistic care for somebody with a new stoma **must** consider the psychological impact... much of which happens after discharge home
- Most people (about 80%) have a 'normal' adjustment ... but it may take months ... and their coping and defence mechanisms may make others uncomfortable
- Some people have a greater risk of problems than others
- The stoma may not be their major concern – ask them what is!
- Stoma bags will also have an impact on body image and intimate relationships may suffer.^{[5][6]} It is good practice, therefore, to enquire about work and psychosocial aspects with patients

(White, 2004; Thompson, 2009, p.22).

Gone viral?



The “normal” surrounding Skin



Peristomal skin integrity

- ▶ The condition and importance of peristomal skin health in stoma care cannot be overstated.
- ▶ Unfortunately, peristomal skin problems are too common, most often the result is disruption of the skin barrier and this may account for more than one in three visits to Ostomy nurses.
- ▶ Many even think that skin problems are a normal part of living with a stoma, and yet it is not.

What causes sore skin around the Stoma?

- ▶ Contact with Faecal enzymes
 - ▶ They break down the skin
 - ▶ Ileostomies have a higher levels of enzymes
 - ▶ Moisture – prolonged contact with water can weaken and break down the skin
 - ▶ Chemical/biological irritants
 - ▶ Healthy Skin can also be compromised by: Ill – fitting stoma appliance, high output stoma, poorly sited stoma etc.
- ▶ Skin break down related to Leakage... an effect rather than a complication



Complications involving Stomas and Skin integrity

What is Normal.

- ▶ Stomas
- ▶ Surrounding skin

Problems

- ▶ Stoma necrosis
- ▶ Mucocutaneous Separation
- ▶ Mechanical Injury
- ▶ Chemical Injury
- ▶ Hypergranulation
- ▶ Irritant Dermatitis
- ▶ Allergic contact dermatitis

Problems

- ▶ Folliculitis
- ▶ Candida Infections
- ▶ Hyperplasia – Pseudo verrucous lesions
- ▶ Psoriasis
- ▶ Pyoderma Gangrenosum
- ▶ The hydrocolloid flange and products

Stoma Necrosis

- ▶ Occurs 3-5 days following surgery.
- ▶ Ischemia - compromised circulation.
 - ▶ Surgical technique.
 - ▶ Thick abdominal wall.
- ▶ Can be partial.
- ▶ If necrotic below fascia level – requires acute surgical intervention.



Stoma Necrosis: Interventions

- ▶ Observe and document.
- ▶ Superficial necrosis.
 - ▶ Powder application can assist with assisting the necrotic tissue to slough away.
- ▶ Odour control.
- ▶ Ensure no added pressure to stoma surface.
- ▶ Follow-up.

Mucocutaneous Separation

When the stoma separates from the skin junction.

Can be circumferential or limited to portion of the junction and can be superficial or deep.



Mucocutaneous Separation

Occurs when there is compromised healing.

- ▶ Malnourished patient.
- ▶ Corticosteroid use.
- ▶ Retraction from excessive tension at the stoma and skin suture line, often seen with abdominal distension.
- ▶ Poorly perfused tissue.
- ▶ Infection.
- ▶ Radiation.
- ▶ Surgical Technique.

Mucocutaneous Separation: Interventions

- ▶ Maximising nutritional state before surgery.
- ▶ Construction with out tension.
- ▶ Corticosteroids may benefit with vitamin A.
- ▶ Cleanse area gently with warm water to ensure fecal matter is removed – patients can shower with area exposed.
- ▶ Powder or Paste into separation – depending on size.
- ▶ Ensure a seal by using a well fitting and sealed flange-the addition of a ring or seal may help.
- ▶ Document and Monitor closely for change in size.

Mechanical Injury

- ▶ Skin stripping
 - most common.
- ▶ Friction from ill fitting flange.
- ▶ Abrasive cleaning.
- ▶ Pressure
 - from convexity or belts.
- ▶ Fragile peristomal skin
 - (e.g., steroids, age)



Mechanical Injury: Interventions

- ▶ Identify the cause.
 - ▶ Evaluate technique and equipment used.
- ▶ Patient examination – look for.
 - ▶ Weight gain/loss.
 - ▶ Parastomal hernia.
 - ▶ Prolapsed stoma.
- ▶ Educate client.
- ▶ Powder – can help provide adhesive surface.
- ▶ Use well fitted flanges.
- ▶ Avoid tape (e.g., tape less skin barriers).
- ▶ Educate client.

Chemical Injuries



Maceration



Erosion



Ulceration

Chemical Injuries: Interventions

LEAKAGE

- ▶ Assessment of the problem - Check the adhesive on the flange – where does the leakage occur?
- ▶ Choose an appropriate and well fitting ostomy appliance.
- ▶ Observe the basic principles for care of peristomal skin care.
- ▶ May require.
 - ▶ Convex appliance.
 - ▶ Powder.
 - ▶ Paste.
 - ▶ Seals.
 - ▶ A belt may be required for added security.
 - ▶ Skin protective barrier wipes.

Hypergranulation



Assessment

- May present with bleeding or leakages

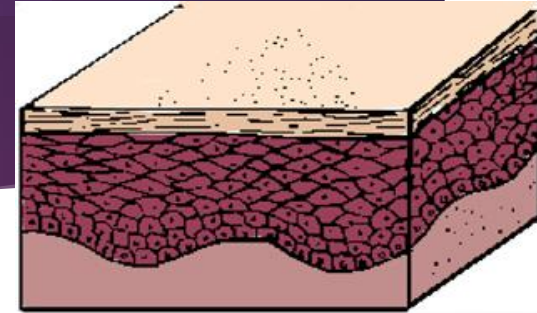
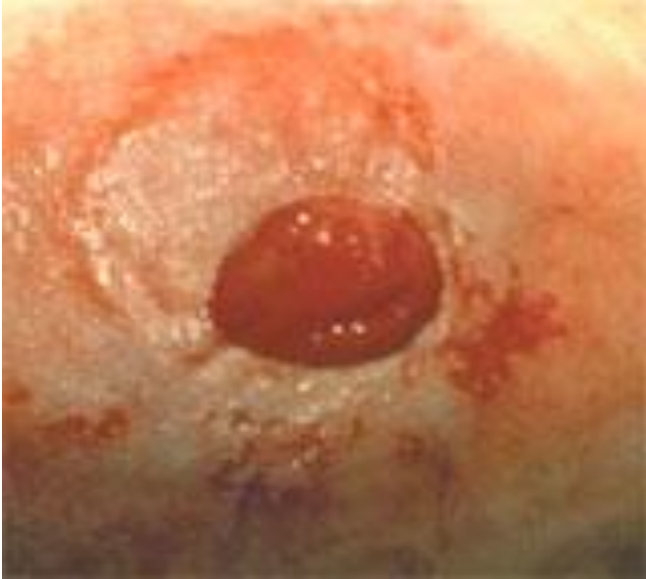
Cause

- Retained suture
- Friction/ irritation

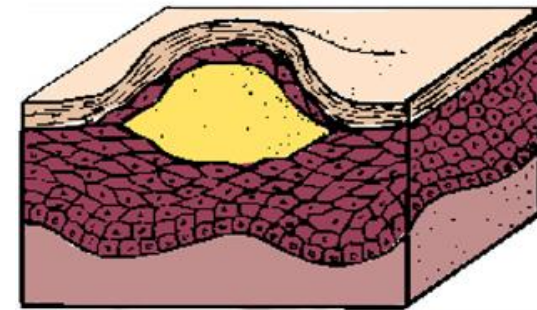
Interventions

- Diathermy with silver nitrate
 - Refer to STN
- (Breckman, 2005, p.284).

Irritant Dermatitis



Erythema



Vesicle

Most common of the skin complications.

- ▶ When the cells in the peristomal area sustain a direct toxic injury or become inflamed without developing specific allergic sensitisation.
- ▶ The skin can be erythematous, shallow, moist areas in severe cases. weeping and discomfort.

Irritant Dermatitis

- ▶ Contributing factors.
 - ▶ Marked PH changes from pouch leakage.
 - ▶ Enzymes.
 - ▶ Ostomy deodorants or solvents.
 - ▶ Soaps.
 - ▶ Physical trauma.

Irritant Dermatitis: Interventions

- ▶ Determine cause.
- ▶ Cleanse skin with baking soda and warm water.
- ▶ Eliminate any irritants e.g. remove wipes and skin lotions.
- ▶ Provide protection with appropriate pouch system and check application technique.
- ▶ Keep the skin dry and sealed – Barrier powder.
- ▶ A topical cortisol steroid preparation may be prescribed.

Allergic Contact Dermatitis

- ▶ Exposure to materials and chemical compounds that irritate the skin on contact (i.e., tape, skin barriers, soap, adhesives, powders, pastes, or pouch material).
- ▶ Redness and irritation in the area covered or treated by a product.



Allergic Contact Dermatitis

- ▶ Alter pouching system or skin care procedure to eliminate product causing the reaction.

Folliculitis



Lawrence Mutale

- ▶ Infection or inflammation of the hair follicle.
- ▶ Appears as erythematous and sometimes a pustular lesion can be confused with yeast infection.
- ▶ Cause:
 - ❖ Poor skin hygiene
 - ❖ Excessive peristomal hair growth
 - ❖ Poor shaving technique

Folliculitis: Interventions

Observe the basic principles of peristomal skin care.

- ▶ Correct hair removal technique, 'go with the hair' use scissors, electric shaver or razor.
- ▶ NB! Do not use hair removal cream.
- ▶ Severe cases check for *Staphylococcus aureus*, if this is present a antibacterial powder may be useful.

Candida Infections (Fungal)

Also referred to as a yeast infection, *Candida albicans* or monilia. Thrives in damp dark sites.

- ▶ Leaking pouch, body perspiration and denuded skin – provide optimum environment.
- ▶ Compromised host (e.g. immunosuppression).
- ▶ Medications (e.g. antibiotics, cancer chemotherapy).
- ▶ Alteration of the normal bacterial flora.
- ▶ Alteration in skin Ph.



Candida Infections

- ▶ Infects the stratum corneum.
- ▶ Initial lesion is a pustule, leaving papules and erythema.
- ▶ Infection forms a plaque.
- ▶ *Monilia*, means *glowing white* – severe extensive infections develop a white coated appearance that indicate the presence of inflammatory cells.

Candida Infections: Interventions

- ▶ Elimination of moisture
 - ❖ Dry environment.
- ▶ Antifungal *powder*.
- ▶ Ensure good seal with pouch flange.
- ▶ Observe the basic principles of peristomal skin care.
- ▶ Urostomy:
 - ❖ Maintain acid pH in urine.
 - ❖ Ensure a well fitting and drainable appliance.

Hyperplasia

Pseudo verrucous lesions



- Also known as: chronic papillomatous dermatitis hyperkeratosis or pseudopitheliomatous hyperplasia (PEH)
- Epidermal hyperplasia secondary to chronic chemical irritation, often in those with no anti-reflux valve or hole cut too big (Szymanski,2010).
- May result from an inflammatory response to friction or trauma e.g. faecal matter, urine, sutures.
- Often very painful, bleeding from these lesions is very common.

Hyperplasia - Pseudo verrucous lesions: Interventions

- ▶ Observe the basic principles of peristomal skin care.
- ▶ Correct the underlying problem – often leakage or ill fitting flange.
- ▶ Cauterize granulomas with silver nitrate.
- ▶ Consider diathermy or laser treatment.
- ▶ Medical review and possible biopsy.

IN RARE CASES THESE CAN BE CANCEROUS.

Psoriasis

- A common skin disorder that can occur underneath pouching systems and skin barriers.
- Chronic recurrent skin condition that presents in many locations on the body as a red inflamed raised patchy rash with an overlay of silvery flakes
- Whitish scaly patches on the palms, scalp, elbows, knees and soles and on the peristomal skin.

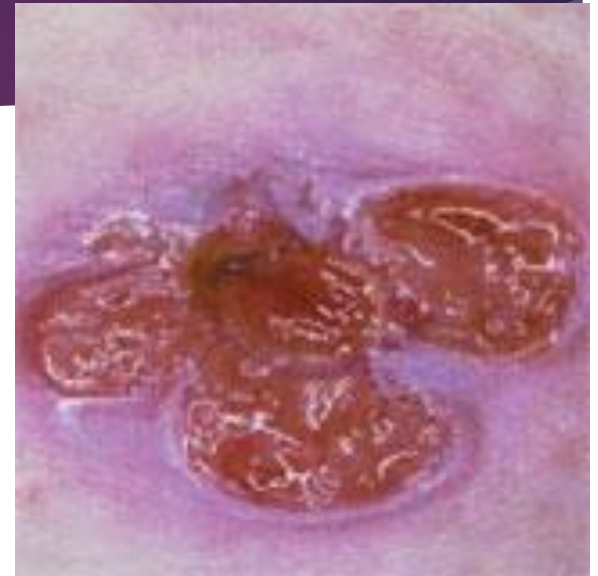


Psoriasis: Interventions

- ▶ Consider decreasing the frequency of pouch changes, if possible.
- ▶ May need consultation with dermatologist to determine your treatment options.
- ▶ Colostomy irrigation may be good option for those with colostomy.

Pyoderma Gangrenosum

- ▶ Skin disease associated with inflammatory bowel diseases such as Crohn's disease and ulcerative colitis.
- ▶ Irregularly shaped painful infected ulcers with red-to-purple rolled margins
- ▶ These may be adjacent to the stoma or elsewhere.



Pyoderma Gangrenosum: Interventions

- ▶ Require prompt treatment and referral to consultant to determine treatment options

Key to Success

- ▶ A well-sited stoma may reduce skin complications.
- ▶ Good stoma protrusion is important.
- ▶ Patients should be educated on the optimal environment for healthy skin and able to recognise "normal" vs. "non-normal" skin.
- ▶ Maintaining a proper fitting stoma care appliance.
- ▶ Access to knowledgeable, trained Stomal Therapy Nurse.

Goal: Peristomal Skin care

- ▶ SEAL - Protect skin from irritating effluent.
 - ▶ Ensure seal around the stoma - preventing effluent from making contact with the skin.
- ▶ HEAL any damaged skin.

The problem solvers

THE HYDROCOLLOID FLANGE HYDROCOLLOID AND PRODUCTS

- ▶ Absorbs wound exudate.
- ▶ Gel formation - provides moist wound environment.
- ▶ Prevents invasion of wound by environment pathogens.
- ▶ Water repellent, allows bathing.
- ▶ Conforms well to wound and body surfaces.

The problem solvers

THE HYDROCOLLOID FLANGE HYDROCOLLOID AND PRODUCTS

- ▶ Reduces pain by keeping the nerve endings moist.
- ▶ Reduces frequency of dressing change – may be effective 5-7 days – depending on exudate.
- ▶ Hydrocolloid cleans and debrides by autolysis.
- ▶ Safe debridement, granulation and epithelialisation can occur in wound at the same time.
- ▶ Comes in various sizes.
- ▶ Comes in various forms flange, paste and powder.

Problem Solvers



Stomahesive® Paste



Stomahesive®
Protective Powder



Orabase® Paste

Peristomal Skin Care: General Principles

- ▶ Avoid unnecessary change of appliance.
- ▶ Avoid use of allergens or irritants (e.g. remove wipes)
- ▶ Remove the bag carefully 'peel down'.
- ▶ Use hand-warm water for cleaning the skin.
- ▶ Use soft disposable materials for cleaning.
- ▶ The skin must be clean and dry before the new appliance is attached.
- ▶ Use a template for correct sizing of the appliance aperture.
- ▶ If additional sealing is required, paste, convex appliance or protective seal.

Conclusion

- Thorough assessment and history.
- Diagnose the cause.
- Appropriate treatment.
- Ongoing evaluation assessment.
- Referral to STN if treatment not successful or if ongoing concerns.

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Thank you

