

Skin Problems

Who is at Risk?

- Obsese
 - Decreased blood flow in adipose tissue
 - Increased sweat
 - Increased bacteria harbored in sweat glands
 - Increased pH in skin folds
- ANYONE with skin folds
- Lack of access to proper hygiene
- Immobile
- Diaphoretic
- Those with splints, braces or in between toes where moisture (sweat) can get trapped

Skin and wound care for the bariatric patient

- Assessment
- Moisture Associated Skin Damage (MASD)
 - Intertriginous Dermatitis (ITD)
- Pressure Injuries
- Surgical Site Infections and Incisional Dehiscence
- Support Surfaces
- Safe Patient Handling

Contributing Factors

- Diabetes
- Reduced perfusion
- Steroid use
- Broad spectrum antibiotics
- Lack of personal hygiene

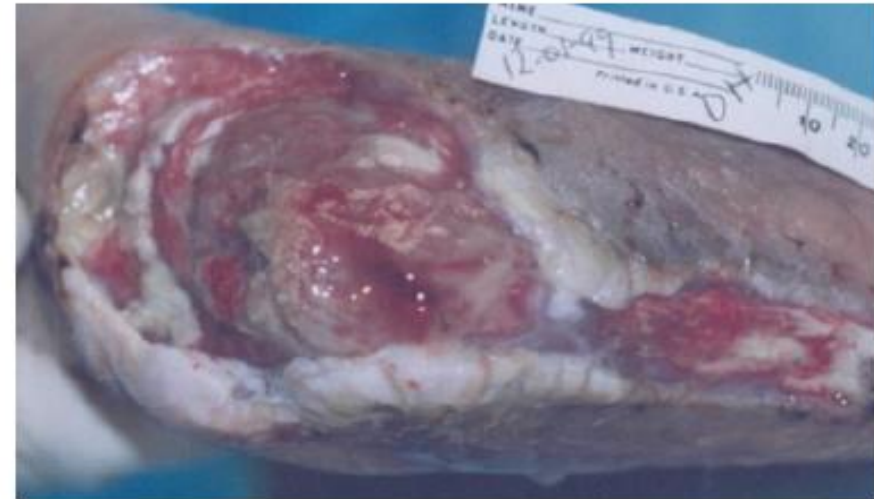
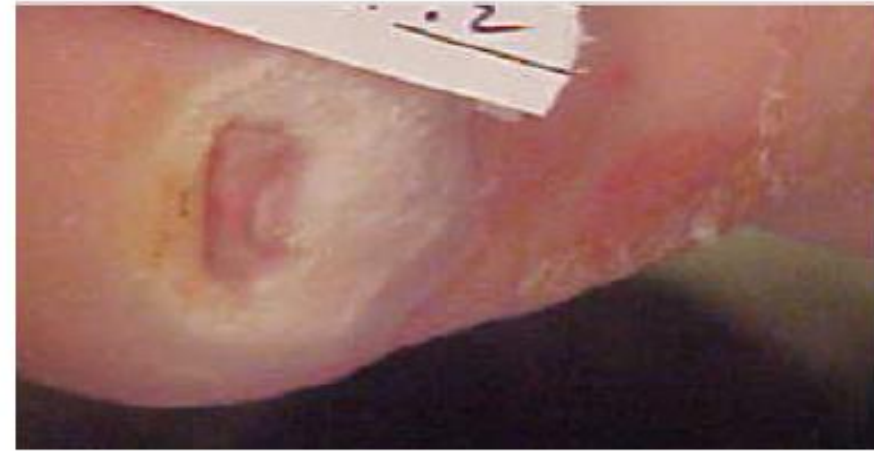
Terminology

- **Diaper rash** - not always associated with a diaper
- **Moisture maceration** - not the only clinical manifestation
- **Contact dermatitis** - term is also used for allergies
- **Irritant dermatitis** - irritants extend beyond urine and stool
- **Excoriation** - does not address the actual irritant (incontinence)
- **Perineal dermatitis**
 - **Males:** between the scrotum and the anus
 - **Females:** between the vulva and the anus



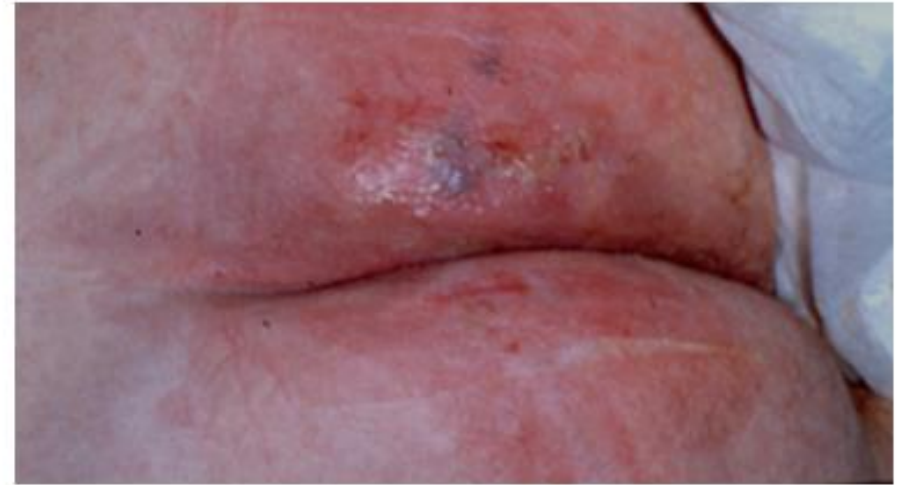
Overhydration

- Exudate levels from the wound leak into surrounding stratum corneum
- Stratum corneum becomes macerated and is more vulnerable to friction and pathogens
- Macerated skin is more prone to epidermal stripping with removal of dressing adhesives



Incontinence Associated Dermatitis

- Inflammation and irritation of skin due to contact with urine or stool
- Often misdiagnosed as a pressure injury
- Skin more susceptible to damage from pathogens as a result of altered pH
- Exacerbated by
 - Soaps and Detergents
 - Cleaning Technique
 - Inappropriate Containment Devices



Denudation

- Partial thickness injury related to
 - Friction
 - Chemical irritation
 - Altered pH
- Severe cases inaccurately referred to as “excoriation”



Yeast Dermatitis (Candidiasis)

Clinical observations

- Rash with distinct satellite lesions
- Pruritic
- Pain

Interventions

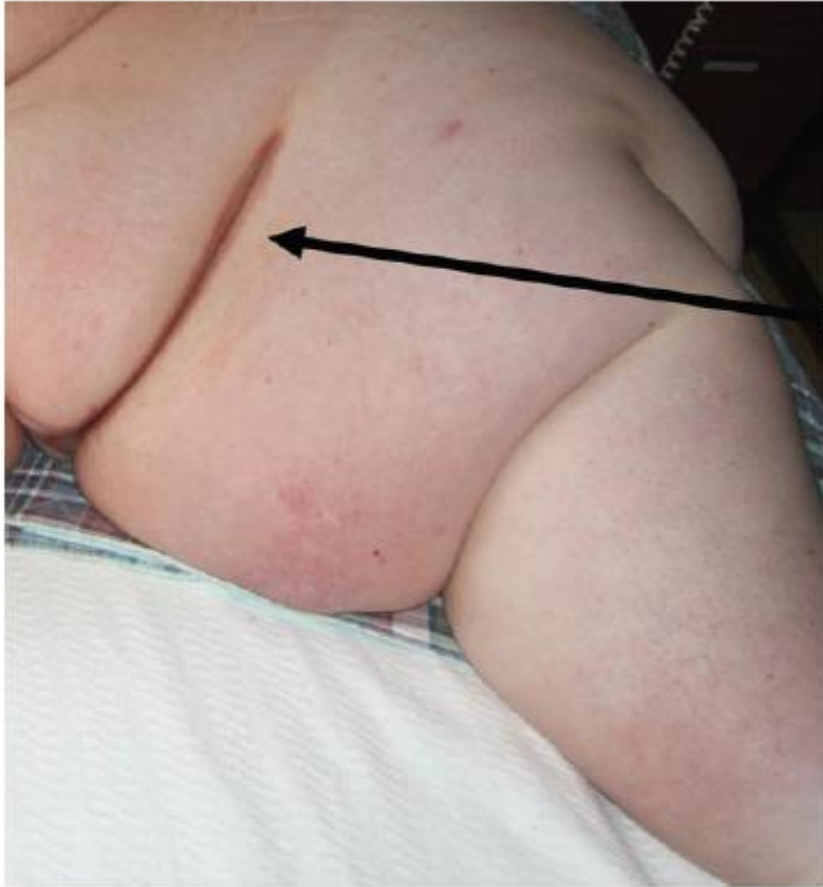
- Eliminate contact with irritants
- Avoid occlusive products
- Absorptive products that wick fluid from the skin
- Antifungal treatments
- Pain management



Yeast Infections



Intertriginous Dermatitis - ITD



Range of ITD

Mild

- Mild erythema within the skin fold

Severe

- Further inflammation
- Mirrored areas of skin erosion or linear fissure formation
- Partial thickness skin damage

Symptoms

- Pain, itching, burning, odor



Things to Avoid

- Gauze
- ABD pads
- Coffee filters/paper towels/napkins
- Linens, e.g. pillow cases, towels, washcloths
- Occlusive ointments
- Excessive use of powder (could increase friction)

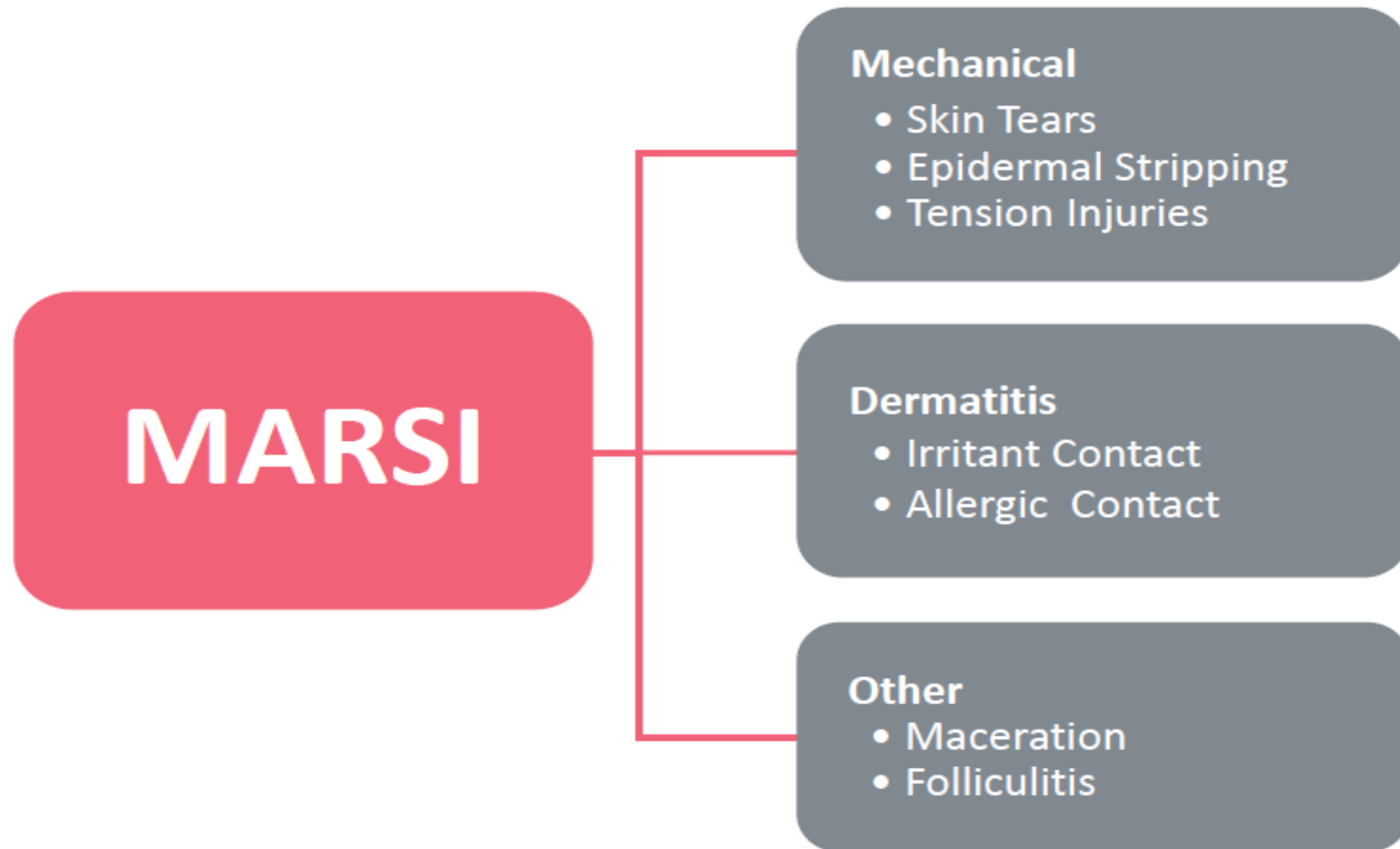
MARSI

Medical Adhesive Related Skin Injury

An occurrence in which erythema and/or other manifestation of cutaneous abnormality (including but not limited to, vesicle, bulla, erosion, or tear) persists 30 minutes or more after removal of the adhesive.



**Skin
Health**



Mechanical Injury

Skin Tears

- The separation of the epidermis from the dermis or the epidermis and dermis separated from underlying structures caused by friction, shear and/or blunt force trauma.
- Primarily on the extremities
 - 80% on arms
- Common causes
 - Traumatic injuries
 - Wheelchair transfers
 - Bumping into objects
 - Falls
 - Inappropriate removal of adhesives

Mechanical Injury

Skin Stripping

- Removal of one or more layers of the epidermis following removal of adhesive tape or dressing
- Lesions are frequently shallow and irregular in shape and the skin may appear shiny
- Contributing factors
 - Improper use
 - Pulling too hard
 - Fragile skin
 - Aggressive taping



Mechanical Injury

Tension Blister

- Separation of the epidermis caused by shear force as a result of distension of the skin under an unyielding adhesive tape or dressing
- Inappropriate strapping or stretching of the adhesive tape or dressing during application when a joint or other area of movement is covered
- Contributing factors
 - Lack of conformability and/or elasticity of the adhesive
 - Lack of breathability of the adhesive
 - Fragile skin

Dermatitis

Irritant Contact

- Cutaneous inflammation that is triggered by exposure to an irritant
- Response is immune mediated, not allergic
- Clinical presentation
 - Erythema
 - Edema
 - Vesicle formation
- More likely to occur with extended exposure
- Reflect the shape of the irritant



Dermatitis

Allergic Contact

- Immune mediated inflammation that triggers the allergen/antigen response
- Clinical presentation
 - Diffuse areas of erythema, edema, vesicle
- The incidence of true allergic dermatitis is not known
- Suspected allergic dermatitis should be considered for referral and/or appropriate investigation such as patch or scratch test



Other

Folliculitis

- Inflammatory reaction in hair follicle caused by shaving or entrapment of bacteria under an adhesive
- Appears as small inflamed elevation of skin surrounding the hair follicle
- May present with papules or pustules



Prevention and Management

Selection of Adhesive

- Consider the material of adhesive
 - Silicone – less aggressive , but may not adhere as well
 - Acrylates – pressure sensitive, apply with firm pressure to “activate” the adhesion
- Consider the breathability of the product
- Consider skin condition
- Contouring and stretchability of the material

Prevention and Management

Preparation of the Skin

- Skin is clean and dry
- Use of skin preps or cyanoacrylates
- Managing presence of excess hair
 - Use clippers, avoid shaving
- Skin care products could interfere with adhesion

Prevention and Management

Application of Adhesive

- Apply without tension or stretch
- Appropriate sizing
- Allow skin preps to dry thoroughly
- Position of body part
 - Especially joints

Alternatives to Adhesives

- Tubular elastic dressing
- Elastic tubular bandage
- Self adherent bandage
- Conforming bandage/roll gauze
- Clothing
- Non-adhesive stabilizing devices (for tubes)

Wound Infection Continuum

- Contamination
- Colonization
- Local infection
- Spreading infection
- Systemic infection



Contamination

- Non-proliferating microbes
- Contained within the wound
- Level of microbes do not elicit a host response
- Contaminants can be:
 - Endogenous – normal skin flora
 - Exogenous – those in environment or spread by health care professional
- Wound healing is not impacted

Colonization

- Microbes have limited proliferation
- Contained within the wound
- Level of microbes do not elicit a host response
- Microbial growth occurs at a non-critical level
- Wound healing is not impacted or delayed

Local infection

- Deeper into the wound
- Invokes a host response
- Infection is contained in one location, structure or system
- May require a topical antimicrobial
- Signs of infection include pain, malodor and delayed healing
- Additional signs of local infection in a chronic wound could be subtle (covert) and/or classic (overt)

Subtle signs of wound infection

- Granulation tissue
- Friable, bright red
- Pocketing
- Hypergranulation
- Epithelial bridging
- Wound breakdown or enlarging wound
- New ulcerations in the periwound margins

Classic signs of wound infection

- Erythema
- Local warmth
- Swelling or edema
- New or increasing pain
- Purulent drainage
- Increasing malodor

Systemic infection

- Infection affects the entire body
- Pathogenic microbes spread through lymphatic or vascular systems
- Sepsis
- Organ dysfunction or organ failure occurs
- Topical antimicrobial and systemic antibiotics required

