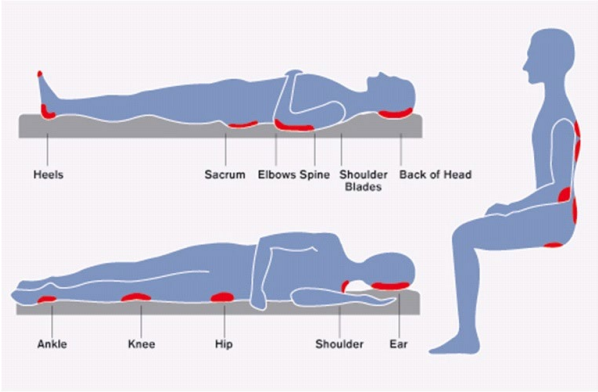






Pediatric Pressure Injury

<p>Prevalence</p> <p>Most common sites</p>	<p>10-35% of hospitalized children, particularly those requiring management in the PICU</p> <p>Sacrum/coccyx (most common site in children), occiput (most common site in infants), heels, ears, elbows</p> 
<p>Time to pressure injury</p>	<p>Can occur within 2–6 hours from the onset of pressure</p>
<p>Stages of pressure injury</p>	<p>STAGE 1: Non-blanchable erythema STAGE 2: Partial thickness injury (blistering) STAGE 3: Full thickness injury (subcutaneous tissue exposed +/- necrosis) STAGE 4: Injury to muscle, bone, or tendon Unstageable Pressure Injury: Obscured full-thickness skin and tissue loss Deep Tissue Pressure Injury: Persistent non-blanchable deep red, maroon or purple discoloration</p>
<p>Risk factors</p>	<ol style="list-style-type: none"> (1) Devices and equipment (e.g., BP cuffs, trach, nasal prongs, noninvasive ventilation interfaces and cutaneous oximetry probes, feeding tubes) (2) Impaired sensory perception (3) Limited physical activity (4) Limited mobility (ability to change and control body position) (5) Friction and shear (6) Moisture (7) Malnutrition (8) Impaired tissue perfusion/oxygenation
<p>Braden QD Scale</p>	<ul style="list-style-type: none"> ❖ Standardized assessment tool of pressure ulcer risk in pediatric patients ❖ Based on assessment of mobility, activity, sensory perception, moisture, friction/shear, nutrition, and tissue perfusion/oxygenation <p>Refer to the "Braden QD Scale" document for details.</p>
<p>Prevention of pressure ulcer development</p>	<p>Dependent on comprehensive and frequent patient assessment and the use of interventions such as:</p> <p>A. Appropriate padding of bony prominences and devices that come in contact with the skin – EXAMPLES:</p> <ul style="list-style-type: none"> ➤ <i>Foam-padded boot (e.g., Prevalon boot) to prevent heel pressure injury</i> 

	<ul style="list-style-type: none"> ➤ <i>Mepilex Border Heal & Sacrum to prevent heal & sacral pressure injuries – label the dressing with "P" for prevention</i>  <ul style="list-style-type: none"> ➤ <i>Polyurethane foam or hydrocolloid dressings underneath devices such as a nasal cannula</i>  <p>B. Use of age-appropriate specialty mattress such as an alternating pressure, low-air loss, foam, or gel mattress</p> <p>C. Frequent repositioning</p> <p>D. Frequent rotation, when possible, of medical devices</p> <p>E. Reduction of moisture (e.g., frequent diaper changes, use of barrier topical agents or moisture-wicking fabric, such as InterDry)</p> 
<p>Management of pressure ulcers</p>	<ul style="list-style-type: none"> ❖ Optimization of the preventative measures ❖ Optimization of the nutritional status ❖ Pain management ❖ Wound Care: <ul style="list-style-type: none"> ➤ Consultation of wound nurse ➤ Wound cleansing with sterile water or NS, then drying the wound well ➤ Topical management and wound dressings as suggested by the wound nurse ➤ Assess and manage wound infection, if present, as appropriate ➤ Surgical consultation for debridement in case of necrotic tissue
<p>Most used dressings</p>	<p>Hydrocolloids, hydrogels (available as amorphous gel and sheets), polyurethane foams, transparent films, gauze</p>
<p>Important references</p>	<p>NATIONAL PRESSURE INJURY ADVISORY PANEL (NPIAP)</p>



Wound care products commonly used in neonates, infants, and children

<i>Dressing Class</i>	<i>Adhesion</i>	<i>Indications</i>	<i>Function</i>	<i>Precautions</i>	<i>Examples</i>
Transparent polyurethane film	May contain adhesive	Skin tears Superficial wounds with little to no exudate Secondary dressing Secure devices to skin	Prevents wound contamination Provides moist wound healing Promotes autolytic debridement Nonabsorptive	Semipermanent; not intended for frequent dressing changes May result in epidermal stripping (if adhesive present)	Tegaderm Opsite
Contact layer	Some contain soft-silicone adhesive	Superficial tears Superficial wounds with little to no exudate First- and second-degree burns Minimal to moderate exudative wounds Pressure ulcers Partial and full-thickness wounds	Prevents wound contamination Provides moist wound healing Allows transfer of exudate into absorbant dressing Nonabsorptive	Requires secondary dressing	Mepitel Mepital-One N-TERFACE Restore Contact Restore Contact Silver Versatel Adaptic Xeroform Conformant Wound Veil
Hydrocolloid (gelatin, pectin, and/or carboxymethyl cellulose)	May contain adhesive	Minimal to moderate exudative wounds Pressure ulcers Partial and full-thickness wounds Promotes autolytic debridement Pressure redistribution	Prevents wound contamination Promotes autolytic debridement Minimal absorption Ease of use	Caution in infected wounds May cause maceration of periwound May result in epidermal stripping (if adhesive present)	Duoderm Tegasorb Medihoney
Polyurethane foam and composite	May contain adhesive	Moderate to heavy exudative wounds Partial and full-thickness wounds Peristomal Pressure redistribution Infected wounds ^b	Ease of removal (only if nonadherent or containing soft silicone adhesive) Ease of use Moderate absorption Pressure redistribution Comfortable	Not for use in dry wounds Requires a secondary dressing (unless composite)	Polymem ^a Allevyn Lyofoam Mepilex Mepilex-Ag Hydrosorb
Hydrogel	Nonadherent	Minimal exudate or dry wounds Partial and full-thickness wounds Burns	Pressure redistribution Reduce pain Promotes autolytic debridement Promotes epithelialization Adds moisture Minimal to moderate absorption Fills dead space Ease of removal	May over-hydrate wound May macerate periwound; consider applying skin sealant first as protection Requires secondary dressing	Sheet: • Vigilon • Elastogel Amorphous: • Solosite • Intrasite • Normlgel • Hypergel • Carrasyn wound gel
Hydrofiber (sodium carboxymethyl cellulose)	None	Moderate to heavy exudative wounds Partial and full-thickness wounds Wound dehiscence Infected wounds ^b Wounds requiring packing	Promotes autolytic debridement Moderate to marked absorption Ease of removal	Requires secondary dressing	Aquacel Aquacel-Ag
Alginate	None	Moderate to heavy exudative wounds Partial and full-thickness wounds Wound dehiscence Infected wounds ^b Wounds requiring packing	Promotes autolytic debridement Moderate to marked absorption Ease of removal	Requires secondary dressing	Kaltostat Medihoney Maxorb extra Maxorb extra-Ag

<i>Dressing Class</i>	<i>Adhesion</i>	<i>Indications</i>	<i>Function</i>	<i>Precautions</i>	<i>Examples</i>
Barrier	None	Diaper dermatitis Peristomal	Protects against moisture-associated skin damage Protects against epidermal stripping Protects against irritation from adhesives	May be difficult to assess wound with opaque preparations Residual cream or ointment should not be removed prior to reapplication	Stomahesive wafer Stomahesive powder Coloplast wafer Sensicare cream Criticaid ointment White petrolatum Zinc oxide ointment Cavilon No-Sting barrier Marathon

^aContains starch co-polymer, glycerol, and surfactant and approved for use in full- and partial-thickness wounds, ulcers, skin tears, surgical wounds, and first- and second-degree burns.

^bDressings containing silver.

References:

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