

# **Úlceras por Presión en los Discapacitados del Desarrollo**

**Departamento de Seguridad Económica  
de Arizona División de Discapacidades del  
Desarrollo**

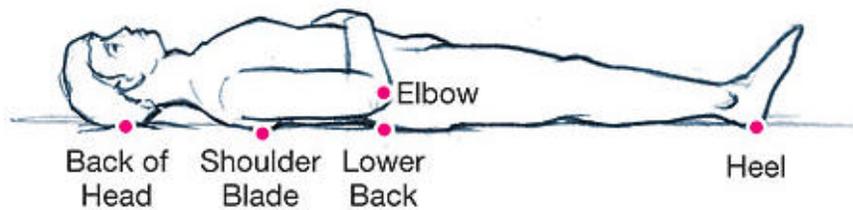
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# ÚLCERAS POR PRESIÓN

Las úlceras por presión son lesiones cutáneas que resultan de la presión constante. Esta presión reduce el flujo sanguíneo y eventualmente causa ruptura de la piel, y se desarrolla una herida abierta. Estas úlceras pueden desarrollarse en poco tiempo en pacientes que están inmóviles, a veces en solo un par de horas. Si no se alivia la presión y se trata la infección, el daño se extenderá a capas más profundas como el músculo, el tendón y el hueso. Las prominencias óseas son las más vulnerables a las úlceras por presión, como el sacro (coxis), las nalgas, los talones, nuca y los codos.

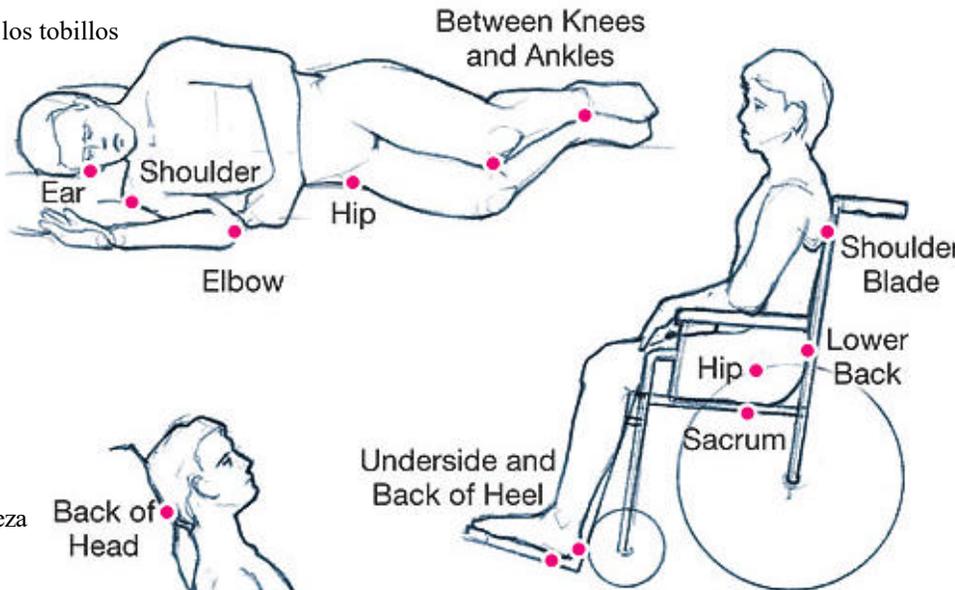
Common Locations of Pressure Ulcers

Lugares comunes de úlceras por presión:



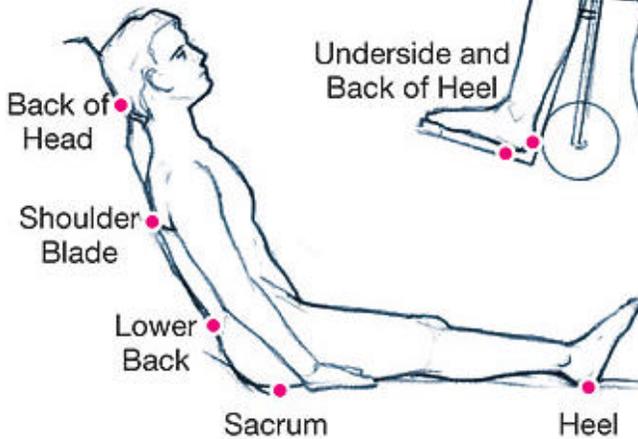
- Parte trasera de la cabeza
- Omóplato
- Lumbar (espalda baja)
- Codo
- Talón (calcáneo)

- Entre las rodillas y los tobillos
- Oído
- Hombro
- Codo
- Cadera



- Omóplato
- Espalda baja (lumbar)
- Cadera
- Sacro
- Parte inferior y parte posterior del talón

- Parte trasera de la cabeza
- Omóplato
- Espalda baja
- Sacro
- Talón



1 FIGURA UTILIZADA CON AUTORIZACIÓN John L. Zeller, MD, PhD, Escritor; Cassio Lynn, MA, Ilustrador; Richard M. Glass, MD, Editor JAMA. 2006; 296:1020. Copyright © 2006 Asociación Médica Americana. Todos los derechos reservados.

## PREVENCIÓN Y TRATAMIENTO DE ÚLCERAS POR PRESIÓN

### Causas de la ruptura de la piel:

- Personas que no pueden reubicarse por sí mismas
- Presión sostenida, especialmente en áreas con poca grasa/músculo debajo de la piel
- Otras causas:
  - Sábanas arrugadas
  - Migas (restos) en la cama
  - Silla de ruedas con una inclinación dispereja
  - Gotas de sudoración o pliegues en la ropa.
  - FRICCIÓN- roce del cuerpo contra otra superficie al girar o transferir
  - CIZALLAMIENTO (rotura): la piel se mueve en una dirección, mientras que el hueso subyacente se mueve en otra dirección. Ocurre cuando está sentado en la cama y se desliza hacia abajo. Esta estira y desgarras las células de la piel y los vasos sanguíneos.

### Prevención:

- Reposicione en la cama cada 2 horas
- Cambie de posición en silla de ruedas cada ½ hora
  - Promueva los ascensores o inclinaciones
  - Cojines antiescaras
  - Reposapiés y brazos acolchados
  - Evite que los pies se deslicen de los reposapiés
- Evite las prominencias óseas
- Ropa protectora suelta
- Elimine fricción y rotura (desgarro)
  - Nunca arrastre a una persona sobre una cama/sábana
  - Siempre LEVANTE (alce)
  - Mantenga la cabecera de la cama a 30° o menos para evitar cortes
- Mantenga la piel limpia, seca e hidratada
- Proteja las zonas de piel seca
- Colchones especializados
- Dieta equilibrada: alta en proteínas, vitaminas A, C, E y zinc si se tolera
- Hidratación adecuada
- LA PIEL DEBE EXAMINARSE TODOS LOS DÍAS (Vea Escala Braden)
  - Reporte cualquier herida o rotura de piel, llagas abiertas
  - Busque atención inmediata si aparecen signos de infección- fiebre, drenaje, mal olor, aumento del calor o enrojecimiento

- Si el paciente no le permite revisar la piel, pídale que firme una declaración negándose a permitir el tratamiento médico.
- Use la Escala Q de Braden modificada para niños <5 años de edad. <sup>2</sup>

Si el paciente no le permite realizar el control de la piel, pídale que firme una negativa para permitir el control médico.

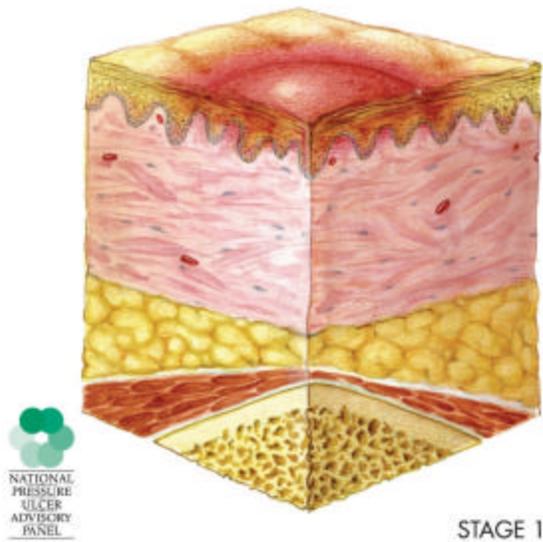
Una vez que se desarrolla una úlcera (llaga), es posible que se necesite tratamiento durante varios meses:

- Antibacterianos (locales y/o sistémicos)
- Desbridamiento periódico (recorte de tejido muerto)
- Es posible que se necesite cirugía para cubrir la zona con una capa o colocar un implante de tejido o para desviar la orina o materia fecal de la zona.

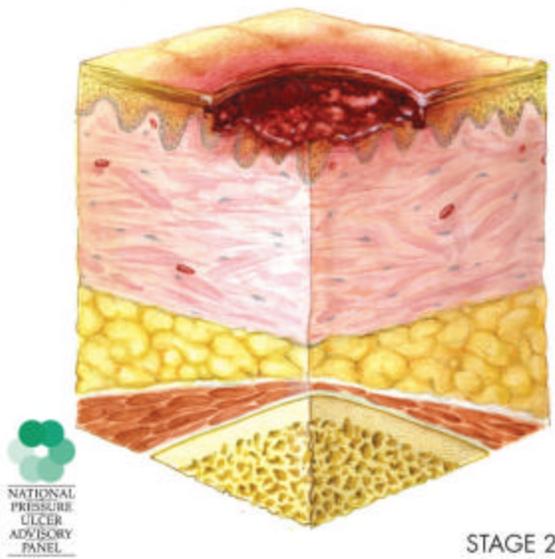
## ETAPAS|FASES DE LAS ÚLCERAS POR PRESIÓN

<http://www.npuap.org/resources.htm>

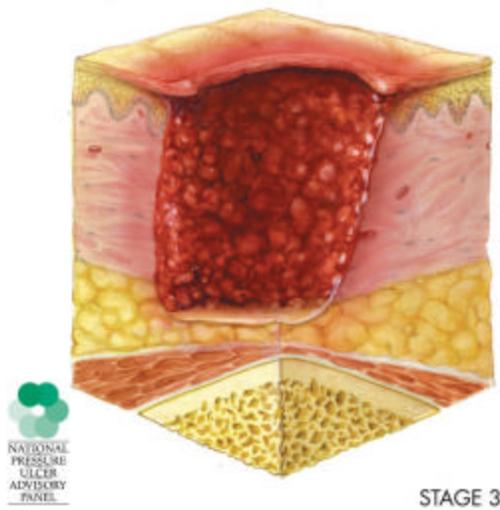
\*El uso de dibujos está permitido únicamente con fines educativos.



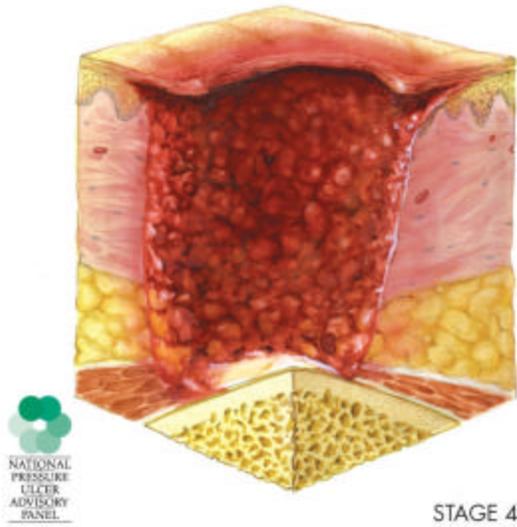
- **Etapa 1**  
La piel es roja o de color más oscuro, pero no presenta roturas en la superficie. Debe sanar dentro de 2 meses, si se trata adecuadamente.



- **Etapa 2**  
Descomposición de la piel, y se forma una úlcera



- **Etapa 3**  
La úlcera es más profunda. Por lo general, no es dolorosa, ya que los nervios están dañados.



- **Etapa 4**  
Cráter profundo, ahora involucra músculos, tendones y huesos. El paciente puede desarrollar sepsis (infección de la sangre) u osteomielitis (infección de los huesos).

# BRADEN PRESSURE ULCER RISK ASSESSMENT

## ACT TO PREVENT PRESSURE ULCERS

<b>SENSORY PERCEPTION</b> Ability to respond meaningfully to pressure-related discomfort. 	<b>NO IMPAIRMENT</b> Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort.	<b>SLIGHTLY LIMITED</b> Responds to verbal commands but cannot always communicate discomfort or ask to be moved or turned OR has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.	<b>VERY LIMITED</b> Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness OR has a sensory impairment which limits the ability to feel pain or discomfort over 1/2 of body.	<b>COMPLETELY LIMITED</b> Unresponsive (does not moan, flinch, or grasp) to painful stimuli due to diminished level of consciousness or sedation OR limited ability to feel pain over most of body surface.	4 3 2 1 <b>ADD TO TOTAL SCORE</b>	
<b>MOISTURE</b> Degree to which skin is exposed to moisture. 	<b>RARELY MOIST</b> Skin is usually dry; linen only requires changing at routine intervals.	<b>OCCASIONALLY MOIST</b> Skin is occasionally moist, requiring an extra linen change approximately once a day.	<b>OFTEN MOIST</b> Skin is often but not always moist. Linen must be changed at least once a shift.	<b>CONSTANTLY MOIST</b> Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.	4 3 2 1 <b>ADD TO TOTAL SCORE</b>	
<b>ACTIVITY</b> Degree of physical activity. 	<b>WALKS FREQUENTLY</b> Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.	<b>WALKS OCCASIONALLY</b> Walks occasionally during day but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.	<b>CHAIRFAST</b> Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	<b>BEDFAST</b> Confined to bed.	4 3 2 1 <b>ADD TO TOTAL SCORE</b>	
<b>MOBILITY</b> Ability to change and control body position. 	<b>NO LIMITATIONS</b> Makes major and frequent changes in position without assistance.	<b>SLIGHTLY LIMITED</b> Makes frequent though slight changes in body or extremity position independently.	<b>VERY LIMITED</b> Makes occasional slight changes in body extremity position but unable to make frequent or significant changes independently.	<b>COMPLETELY IMMOBILE</b> Does not make even slight changes in body or extremity position without assistance.	4 3 2 1 <b>ADD TO TOTAL SCORE</b>	
<b>NUTRITION</b> Usual food intake pattern *NPO: Nothing by mouth. *IV: Intravenously. *TPN: Total parenteral nutrition. 	<b>EXCELLENT</b> Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.	<b>ADEQUATE</b> Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally will refuse a meal, but will usually take a supplement. If ordered, OR is on a tube feeding or TPN regimen, which probably meets most of nutritional needs.	<b>PROBABLY INADEQUATE</b> Rarely eats a complete meal and generally eats only about 1/2 of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement. OR receives less than optimum amount of liquid diet or tube feeding.	<b>VERY POOR</b> Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement. OR is NPO and/or maintained on clear liquids or IV for more than 5 days.	4 3 2 1 <b>ADD TO TOTAL SCORE</b>	
<b>FRICTION &amp; SHEAR</b> 	<b>NO APPARENT PROBLEM</b> Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during moves. Maintains good position in bed or chair at all times.	<b>POTENTIAL PROBLEM</b> Moves feebly or requires minimum assistance. During a move, skin probably slides to some extent against sheets, chair, restraints, or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.	<b>PROBLEM</b> Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures, or agitation leads to almost constant friction.	4 3 2 1 <b>ADD TO TOTAL SCORE</b>		
<b>RISK SCALE</b>	<b>NONE</b> 23 22 21 20 19	<b>MILD</b> 18 17 16 15	<b>MODERATE</b> 14 13	<b>HIGH</b> 12 11 10	<b>SEVERE</b> 9 8 7 6	<b>TOTAL SCORE</b> USE CHART ON LEFT TO DETERMINE YOUR PATIENT'S RISK
<b>EQUIPMENT</b>	No additional pressure support required	High specification foam mattress or static air overlay. Consider cushion for chair, Bedcradle/groenbeck	Dynamic air overlay, Dynamic air cushion Dynamic mattress Replacement or Low Air Loss			
<b>PRACTICE</b>	<ul style="list-style-type: none"> <li>Educate</li> <li>Weight-shifting, Skin inspection</li> <li>Evaluate on change of condition</li> </ul>	<ul style="list-style-type: none"> <li>Reposition</li> <li>Weight-shifting, Skin inspection</li> <li>Promote Activity</li> <li>Manage individual risk factors</li> <li>nutrients; shear; friction; continence</li> <li>Educate</li> <li>Evaluate on change of condition</li> </ul>	<b>ALL PLUS</b> <ul style="list-style-type: none"> <li>Supplement with small positional shifts</li> <li>Seating/posture assessment</li> <li>Nutritional assessment</li> <li>Educate</li> <li>Evaluate on change of condition</li> </ul>			

Reference: "The Braden Scale of Predicting Pressure Sore Risk" Bergstrom, K; Braden, B et al. Nursing Research 1982; Vol 28 No 4 p225-231. Issued by Royal Adelaide Hospital Staff Development Department. In conjunction with SAHA Australian Quality Council. Pressure Ulcer Prevention Practice - Integration of Evidence.

Braden Risk Assessment Tool		Affix patient identification label in this box		
		Date of Assessment		
CATEGORY	DESCRIPTOR	SCORE	SCORE	SCORE
Sensory Perception Ability to respond meaningfully to pressure related discomfort	Completely Limited: Unresponsive (does not moan, flinch or grasp) to painful stimuli due to diminished level of consciousness or sedation. OR, limited ability to feel pain over most of body surface.	1	1	1
	Very Limited: Responds to only painful stimuli. Cannot communicate discomfort except by moaning or restlessness; OR has sensory impairment that limits the ability to feel pain or discomfort over half of body.	2	2	2
	Slightly Limited: Responds to verbal commands, but cannot always communicate discomfort or need to be turned; OR, has sensory impairment that limits the ability to feel pain or discomfort in one or two extremities.	3	3	3
	No Impairment: Responds to verbal commands. Has no sensory deficit that would limit ability to feel or communicate pain or discomfort.	4	4	4
Mobility Ability to change and maintain own position	Completely immobile: Does not make even slight changes in body or extremity position without assistance.	1	1	1
	Very limited: Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.	2	2	2
	Slightly limited: Makes frequent though slight changes in body or extremity position independently	3	3	3
	No limitations: makes major and frequent changes in position without assistance.	4	4	4
Activity Degree of physical activity	Bed fast: confined to bed (can't sit at all).	1	1	1
	Chairfast: Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	2	2	2
	Walks occasionally: walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.	3	3	3
	Walks frequently: Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.	4	4	4
Moisture Degree to which skin is exposed to moisture	Constantly moist: skin is kept moist almost constantly by perspiration, urine, drainage etc. Dampness is detected every time patient is moved or turned.	1	1	1
	Very moist: Skin is often, but not always, moist. Linen must be changed at least every 8 hours. Dry 2-3 hours at a time	2	2	2
	Occasionally moist: Skin is occasionally moist, requiring linen change every 12 hours	3	3	3
	Rarely moist: Skin is usually dry, linen only requires changing every 24 hours.	4	4	4
Friction Shear	Problem: Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. spasticity, contractures, itching or agitation leads to almost constant friction	1	1	1
	Potential problem: Moves feebly or requires minimum assistance. During a move, skin probably slides to some extent against sheets, chair, restraint or other devices. Maintains relative good position in chair or bed most of the time but occasionally slides down.	2	2	2
	No apparent problem: Able to completely lift patient during a position change, moves in bed and in chair independently and has sufficient muscle strength to lift completely during move. Maintains good position in bed or chair at all times.	3	3	3
Nutrition	Very poor: NPO and/or maintained on clear fluids, or IVs for more than 5 days OR never eats a complete meal. Rarely eats more than 1/3 of any food offered. Protein intake includes only 2 servings of meat or dairy products per day. Takes fluids poorly. Does not take a liquid dietary supplement.	1	1	1
	Inadequate: Is on a liquid diet or tube feedings/TPN, which provide inadequate calories and minerals for age OR rarely eats a complete meal and generally eats only half of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement	2	2	2
	Adequate: Is on tube feedings OR eats over half of most meals. Eats a total of 4 servings of protein each day. Occasionally eats between meals. Does not require supplementation.	3	3	3
	Excellent: Is on TPN, which provides adequate calories and minerals for age OR is on a normal diet providing adequate calories for age. For example, eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.	4	4	4
mild risk- 15-15 moderate risk - 14-13 high risk - 12-10 severe risk - <9		<b>TOTAL SCORE</b>		

**PATIENTS SCORING 12 OR BELOW SHOULD BE CONSIDERED FOR A DYNAMIC AIR MATTRESS**

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## REFERENCIAS:

<sup>1</sup> John L. Zeller, MD, PhD, Writer; Cassio Lynn, MA, Ilustrador; Richard M. Glass, MD, Editor *JAMA*. 2006; 296:1020. Copyright © 2006 Asociación Médica Americana. Todos los derechos reservados

<sup>2</sup><http://www.safetyandquality.sa.gov.au/Portals/0/Braden%20Q%20Risk%20Assessment%20scale.pdf> consultado el 27 de mayo de 2009. (Cartel de escala Braden, escala Braden Q)

<sup>3</sup>[http://www.guideline.gov/summary/summary.aspx?doc\\_id=7006&nbr=004215&string=pressure+AND+ulcers](http://www.guideline.gov/summary/summary.aspx?doc_id=7006&nbr=004215&string=pressure+AND+ulcers) consultado el 27 de mayo de 2009

<sup>4</sup><http://www.npuap.org/resources.htm> accedido el 27 de mayo de 2009. **\*El uso de dibujos es permitido únicamente con fines educativos.**