Clinical question What local pressure injury treatments are effective for supporting healing (i.e. cleansing, debridement, topical agents, wound dressings, etc.)?

Recommendation 12.1 Cleanse the pressure injury.

Option: Cleansing a pressure injury
Comparison: No cleansing

Background: Wound cleansing is the process of using fluids to remove surface contaminants (debris), remnants of previous dressings and bacteria from the wound and peri-wound surface.

BENEFITS & HARMS OF THE RECOMMENDED PRACTICE

CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
What is the overall certainty of the evidence of effectiveness?	*No included studies* ☐ | *Very low* ☒ | *Low* ☐ | *Moderate* ☐ | *High* ☐	**Evidence for reduction in wound size** • In individuals with SCI with Category/Stage III or IV pressure injuries (n=28), cleansing using low pressure pulsatile lavage versus no cleansing was associated with statistically significantly faster improvements over three weeks in wound depth (p<0.001), width (p<0.001), length (p<0.0001) and volume (p<0.001[1] (*Level 1, moderate quality*) • In individuals with Category/Stage II and III pressure injuries (n=50), cleansing pressure injuries as a part of the wound care regimen was associated with statistically significantly greater reduction in wound area at 28 days compared with no cleansing (air exposure to promote scabbing) (p<0.05).[2] (*Level 1, low quality*) **Evidence for improvement in PUSH score** • In individuals with Category/Stage II and III pressure injuries (n=50), cleansing pressure injuries as a part of the wound care regimen was associated with statistically significantly more wounds assessed as improved at 28 days based on PUSH score compared with no cleansing (air exposure to promote scabbing) (92% versus 60%, p<0.001).[2] (*Level 1, low quality*)	
Is there important uncertainty about how much people value the main outcomes?	*Important uncertainty or variability* ☐ | *Possibly important uncertainty or variability* ☐ | *Probably no important uncertainty or variability* ☐ | *No important uncertainty or variability* ☐ | *No known undesirable outcomes* ☒		
How substantial are the desirable anticipated effects?	*Unclear* ☒ | *Not substantial* ☐ | *Probably not substantial* ☐ | *Probably substantial* ☐ | *Substantial* ☐		
How substantial are the undesirable anticipated effects?	*Unclear* ☐ | *Not substantial* ☒ | *Probably not substantial* ☐ | *Probably substantial* ☐ | *Substanital* ☐		
Do the desirable effects outweigh the undesirable effects?	*No* ☐ | *Probably No* ☐ | *Uncertain* ☐ | *Probably Yes* ☒ | *Yes* ☐ | *Varies* ☐	**Strength of evidence: B1 - Level 1 studies of moderate or low quality providing direct evidence**	

	CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
RESOURCE USE	**How substantial are the resource requirements?**	*Not clear* ☒ | *Not sub-stantial* ☐ | *Probably not sub-stantial* ☐ | *Probably sub-stantial* ☐ | *Sub-stanital* ☐ | *Varies* ☐	No evidence available	
PRIORITY AND ACCEPTABILITY	**Is the option acceptable to key stakeholders?**	*No* ☐ | *Probably No* ☐ | *Uncertain* ☒ | *Probably Yes* ☐ | *Yes* ☐ | *Varies* ☐	No evidence available	
PRIORITY AND ACCEPTABILITY	**Is the option a priority for key stakeholders?**	*No* ☐ | *Probably No* ☐ | *Uncertain* ☒ | *Probably Yes* ☐ | *Yes* ☐ | *Varies* ☐	No evidence available	
FEASIBILITY	**Is the option feasible to implement?**	*No* ☐ | *Probably No* ☐ | *Uncertain* ☐ | *Probably Yes* ☐ | *Yes* ☐ | *Varies* ☒	• Feasibility of wound cleansing is dependent on access to appropriate supplies (e.g. clean potable water, sterile cleansing solutions, personal protective equipment), the clinical setting (e.g. accessibility of non-contaminated washing area, whether facilities are shared) and the geographic location. Practicalities require assessment at the local level. (*Expert opinion*)	

Balance of consequences	Undesirable consequences *clearly outweigh* desirable consequences in most settings ☐	Undesirable consequences *probably outweigh* desirable consequences in most settings ☐	The balance between desirable and undesirable consequences *is closely balanced or uncertain* ☐	Desirable consequences *probably outweigh* undesirable consequences in most settings ☒	Desirable consequences *clearly outweigh* undesirable consequences in most settings ☐
Strength of recommendation	Strong negative recommendation: Definitely don't it ☐	Weak negative recommendation: Probably don't do it ☐	No specific recommendation ☐	Weak positive recommendation: Probably do it ☒	Strong positive recommendation: Definitely do it ☐
Justification	There is only a small body of evidence on cleansing pressure injuries. Two small, moderate[1] and low[2] quality Level 1 studies provide evidence that cleansing a pressure injury is associated with statistically significant reduction in wound size and improvements in pressure injury severity than when cleansing is not performed. In one study, low pressure pulsatile lavage was more effective than no lavage,[1] and in the second study cleansing was more effective than allowing the wound bed to dry.[2]				
Research priorities					

Clinical question	What local pressure injury treatments are effective for supporting healing (i.e. cleansing, debridement, topical agents, wound dressings, etc.)?
Good Practice Statement 12.2	**Use cleansing solutions with antimicrobials to clean pressure injuries with suspected or confirmed infection.**

Background: Wound cleansing is the process of using fluids to remove surface contaminants (debris), remnants of previous dressings and bacteria from the wound and peri-wound surface.

	SUPPORTING EVIDENCE, WHEN AVAILABLE
Evidence to support the opinion (when available)	• The ideal cleansing agent and optimal wound cleansing method for pressure injuries have not been established.[3,4]
Justification	Cleansers with antimicrobial assist in managing bioburden. Some cleansers combine an antimicrobial with a surfactant that lowers surface tension and promote spread of the liquid across the wound bed, facilitating separation of loose, non-viable tissue and bioburden.

Clinical question	What local pressure injury treatments are effective for supporting healing (i.e. cleansing, debridement, topical agents, wound dressings, etc.)?
Recommendation 12.3	**Cleanse the skin surrounding the pressure injury.**

Option: Cleansing the peri-wound skin
Comparison: No cleansing

Background: Wound cleansing is the process of using fluids to remove surface contaminants (debris), remnants of previous dressings and bacteria from the wound and peri-wound surface.

BENEFITS & HARMS OF THE RECOMMENDED PRACTICE

CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
What is the overall certainty of the evidence of effectiveness?	*No included studies* ☐ | *Very low* ☒ | *Low* ☐ | *Moderate* ☐ | *High* ☐	**Evidence for faster healing rate** • In older adults with Category/Stage II or greater pressure injuries (n=189), pressure injury healing was significantly faster when the peri-wound skin was cleansed with a "pH-balanced" cleanser (pH not specified) compared to normal saline (15 days versus 20 days, p=0.002).[5] (*Level 2, low quality*) **Evidence for reduction in skin microbials** • In older adults (n=5), there was a significant reduction in peri-wound skin microbial counts immediately after cleansing (p<0.05), but microbial levels returned to baseline within 24 hours.[6] (*Level 4, low quality*)	
Is there important uncertainty about how much people value the main outcomes?	*Important uncertainty or variability* ☐ | *Possibly important uncertainty or variability* ☐ | *Probably no important uncertainty or variability* ☐ | *No important uncertainty or variability* ☐ | *No known undesirable outcomes* ☒		
How substantial are the desirable anticipated effects?	*Unclear* ☒ | *Not substantial* ☐ | *Probably not substantial* ☐ | *Probably substantial* ☐ | *Substantial* ☐		
How substantial are the undesirable anticipated effects?	*Unclear* ☐ | *Not substantial* ☒ | *Probably not substantial* ☐ | *Probably substantial* ☐ | *Substanital* ☐	**Strength of evidence: B2 - Level 2 studies of low quality providing direct evidence**	
Do the desirable effects outweigh the undesirable effects?	*No* ☐ | *Probably No* ☐ | *Uncertain* ☐ | *Probably Yes* ☒ | *Yes* ☐ | *Varies* ☐		

	CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
RESOURCE USE	**How substantial are the resource requirements?**	*Not clear* [X] | *Not sub-stantial* [ ] | *Probably not sub-stantial* [ ] | *Probably sub-stantial* [ ] | *Sub-stanital* [ ] | *Varies* [ ]	No evidence available	
PRIORITY AND ACCEPTABILITY	**Is the option acceptable to key stakeholders?**	*No* [ ] | *Probably No* [ ] | *Uncertain* [X] | *Probably Yes* [ ] | *Yes* [ ] | *Varies* [ ]	No evidence available	
	Is the option a priority for key stakeholders?	*No* [ ] | *Probably No* [ ] | *Uncertain* [X] | *Probably Yes* [ ] | *Yes* [ ] | *Varies* [ ]	No evidence available	
FEASIBILITY	**Is the option feasible to implement?**	*No* [ ] | *Probably No* [ ] | *Uncertain* [ ] | *Probably Yes* [ ] | *Yes* [ ] | *Varies* [X]	• Feasibility of peri-wound skin cleansing is dependent on access to appropriate supplies (e.g. clean potable water, sterile cleansing solutions, personal protective equipment), the clinical setting (e.g. accessibility of non-contaminated washing area, whether facilities are shared) and the geographic location. Practicalities require assessment at the local level. (*Expert opinion*)	

Balance of consequences	Undesirable consequences *clearly outweigh* desirable consequences in most settings ☐	Undesirable consequences *probably outweigh* desirable consequences in most settings ☐	The balance between desirable and undesirable consequences *is closely balanced or uncertain* ☐	Desirable consequences *probably outweigh* undesirable consequences in most settings ☒	Desirable consequences *clearly outweigh* undesirable consequences in most settings ☐
Strength of recommendation	Strong negative recommendation: Definitely don't it ☐	Weak negative recommendation: Probably don't do it ☐	No specific recommendation ☐	Weak positive recommendation: Probably do it ☒	Strong positive recommendation: Definitely do it ☐
Justification	Research supporting the recommendation to cleanse skin surrounding the pressure injury comes from a low quality Level 2 study[5] that found faster healing was associated with peri-wound cleansing for Category/Stage II pressure injuries. Additionally, a low quality Level 4 study[6] suggested that peri-wound cleansing is associated with a reduction in skin microbials for up to 24 hours.				

Clinical question	What local pressure injury treatments are effective for supporting healing (i.e. cleansing, debridement, topical agents, wound dressings, etc.)?
Recommendation 12.4	**Avoid disturbing stable, hard, dry eschar in ischemic limbs and heels, unless infection is suspected**

Option: Debridement of a pressure injury
Comparison: No debridement

Background: Stable, dry, intact eschar provides a natural wound cover and should not be removed unless clinical assessment indicates the presence of adequate perfusion and that there is no obvious risk of infection and healing will be expedited.

BENEFITS & HARMS OF THE RECOMMENDED PRACTICE

CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
What is the overall certainty of the evidence of effectiveness?	*No included studies* ☐ | *Very low* ☒ | *Low* ☐ | *Moderate* ☐ | *High* ☐	**Evidence for leaving eschar in situ** • In older adults with heel pressure injuries covered in eschar or blister (n=179), leaving eschar intact unless it became loosened was associated with 100% healed within an average of 11 weeks (range 2 to 50 weeks).[7] (*Level 3, low quality*)	
Is there important uncertainty about how much people value the main outcomes?	*Important uncertainty or variability* ☐ | *Possibly important uncertainty or variability* ☒ | *Probably no important uncertainty or variability* ☐ | *No important uncertainty or variability* ☐ | *No known undesirable outcomes* ☐	**Strength of evidence: B2 - Level 3 or 4 studies (regardless of quality) providing direct evidence**	
How substantial are the desirable anticipated effects?	*Unclear* ☐ | *Not substantial* ☐ | *Probably not substantial* ☐ | *Probably substantial* ☒ | *Substantial* ☐		
How substantial are the undesirable anticipated effects?	*Unclear* ☒ | *Not substantial* ☐ | *Probably not substantial* ☐ | *Probably substantial* ☐ | *Substanital* ☐		
Do the desirable effects outweigh the undesirable effects?	*No* ☐ | *Probably No* ☐ | *Uncertain* ☐ | *Probably Yes* ☒ | *Yes* ☐ | *Varies* ☐		

	CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
RESOURCE USE	**How substantial are the resource requirements?**	*Not clear* ☒ | *Not sub-stantial* ☐ | *Probably not sub-stantial* ☐ | *Probably sub-stantial* ☐ | *Sub-stanital* ☐ | *Varies* ☐	No evidence available	
PRIORITY AND ACCEPTABILITY	**Is the option acceptable to key stakeholders?**	*No* ☐ | *Probably No* ☐ | *Uncertain* ☒ | *Probably Yes* ☐ | *Yes* ☐ | *Varies* ☐	No evidence available	
PRIORITY AND ACCEPTABILITY	**Is the option a priority for key stakeholders?**	*No* ☐ | *Probably No* ☐ | *Uncertain* ☒ | *Probably Yes* ☐ | *Yes* ☐ | *Varies* ☐	No evidence available	
FEASIBILITY	**Is the option feasible to implement?**	*No* ☐ | *Probably No* ☐ | *Uncertain* ☐ | *Probably Yes* ☐ | *Yes* ☐ | *Varies* ☒	• Conservative sharp debridement and surgical/sharp debridement must be performed by specially trained, competent, qualified, and licensed health professionals consistent with local legal and regulatory statutes (*Expert opinion*).	

Balance of consequences	Undesirable consequences *clearly outweigh* desirable consequences in most settings ☐	Undesirable consequences *probably outweigh* desirable consequences in most settings ☐	The balance between desirable and undesirable consequences *is closely balanced or uncertain* ☐	Desirable consequences *probably outweigh* undesirable consequences in most settings ☒	Desirable consequences *clearly outweigh* undesirable consequences in most settings ☐
Strength of recommendation	Strong negative recommendation: Definitely don't it ☐	Weak negative recommendation: Probably don't do it ☐	No specific recommendation ☐	Weak positive recommendation: Probably do it ☐	Strong positive recommendation: Definitely do it ☒
Justification	One low quality Level 3 study[7] supports the recommendation to avoid disturbing stable eschar. When heel eschar was left intact, 99.3% of heel pressure injuries healed in an average duration of 11 weeks.				

Clinical question What local pressure injury treatments are effective for supporting healing (i.e. cleansing, debridement, topical agents, wound dressings, etc.)?

Recommendation 12.5 **Debride the pressure injury of devitalized tissue and suspected or confirmed biofilm and perform maintenance debridement until the wound bed is free of devitalized tissue and covered with granulation tissue.**

Option: Debridement of a pressure injury
Comparison: No debridement

Background: Debridement is the process of removing non-vital tissue from wounds. IN the presence of adequate wound bed vascularity debridement is believed to hold a key role in wound bed preparation, addressing not only the barriers to chronic wound healing but also providing potential stimulatory effects.[8-10]

BENEFITS & HARMS OF THE RECOMMENDED PRACTICE

CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
What is the overall certainty of the evidence of effectiveness?	*No included studies* ☐ | *Very low* ☐ | *Low* ☐ | *Moderate* ☒ | *High* ☐	**Evidence for sharp debridement** • In pressure injuries debrided eight or more times using sharp debridement (n=227), 23% were completely healed by 12 weeks (average healing time 137 days).[11] (*Level 3, low quality*) • In pressure injuries debrided eight or more times using sharp debridement (n=227), 73% achieved improvement in 12 weeks with an average 40% reduction in wound surface area.[11] (*Level 3, low quality*) • In individuals with chronic wounds (n=3), sharp debridement was associated with a significant reduction in susceptibility to antibiotics of biofilm at 24 hours ($p<0.05$).[12] (*Indirect evidence*)	There is strong informed clinical consensus to support the role of debridement in wound bed preparation, despite the ethically understandable lack of randomized controlled trials directly comparing debridement to no debridement in human subjects.[8,23-38]
Is there important uncertainty about how much people value the main outcomes?	*Important uncertainty or variability* ☐ | *Possibly important uncertainty or variability* ☐ | *Probably no important uncertainty or variability* ☐ | *No important uncertainty or variability* ☐ | *No known undesirable outcomes* ☒		
How substantial are the desirable anticipated effects?	*Unclear* ☐ | *Not substantial* ☐ | *Probably not substantial* ☐ | *Probably substantial* ☒ | *Substantial* ☐	**Evidence for enzymatic debridement** • In Category/Stage II to IV pressure injuries (n=26), debrided with clostridial collagenase ointment (CCO) was similar to debridement with papain-urea for complete healing rate.[13] *(Level 1, moderate quality)* • In Category/Stage II to IV pressure injuries (n=78), there was no significant difference in reduction of devitalized tissue between collagenase to and fibrinolysin/deoxyribonuclease.[14] *(Level 1, moderate quality)* • In Category/Stage III and IV pressure injuries (n=27), significantly more reached complete healing by 84 days when debrided with CCO compared with autolytic debridement with hydrogel (69% vs 21%, $p=0.02$).[15] (*Level 1, low quality*) • In Category/Stage IV pressure injuries (n=434), debridement with CCO was associated with a higher percent reaching complete healing after 12 months compared to sharp debridement (22% vs 11%, hazard ratio [HR] 1.85, 95% CI 1.28 to 2.68, $p=0.001$).[16] (*Level 3, low quality*) • In Category/Stage III and IV pressure injuries receiving negative pressure wound therapy (NPWT) (n=114), there was no significant difference in change in wound surface area between wounds that received CCO compared to wounds receiving sharp debridement.[17] (*Level 3, high quality*) • In Category/Stage III and IV pressure injuries receiving NPWT (n=114), wounds that	
How substantial are the undesirable anticipated effects?	*Unclear* ☒ | *Not substantial* ☐ | *Probably not substantial* ☐ | *Probably substantial* ☐ | *Substanital* ☐		
Do the desirable effects outweigh the undesirable effects?	*No* ☐ | *Probably No* ☐ | *Uncertain* ☐ | *Probably Yes* ☒ | *Yes* ☐ | *Varies* ☐		

	CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
			received CCO had significantly greater improvements in overall score (p=0.022) and in necrotic tissue score (p=0.0001) on the Bates-Jensen Wound Assessment Tool (BWAT) compared to wounds receiving no debridement or sharp debridement.[17] (*Level 3, high quality*) • In pressure injuries of unknown severity (n=557), achievement of 100% granulation within 12 months of treatment was 38% more likely with debridement using CCO compared with autolytic debridement using honey (OR 1.384, 95% CI 1.057 to 1.812, p = 0.018).[18] (*Level 3, high quality*) **Evidence for autolytic debridement** • In necrotic pressure injuries (n=38), two different hydrogels performed equally well in achieving debridement as measured by wound size achieved following debridement, (p=0.08).[19] (*Level 1, low quality*) • In Category/Stage III pressure injuries (n=135), debridement with hydrogel performed equally with dextranomer paste in achieving improvement in amount of non-viable tissue.[20] (*Level 1, low quality*) • In Category/Stage IV pressure injuries (n=37) there was no significant difference between debridement with a hydrocolloid dressing or debridement with CCO at 12 weeks for wound area reduction (83% autolytic, 73.7% CCO, p=0.754).[21] (*Level 1, low quality*) **Evidence for maintenance debridement** • In chronic wounds treated in wound clinics (n=312,744, 16% of which were pressure injuries) higher debridement frequencies (i.e. weekly or more frequently) resulted in increased hazard ratios for healing when compared with an interval between debridements of less than two weeks. (e.g. higher weekly debridement rates HR = 4.26 (95% CI 4.20 to 4.31).[22] (*Indirect evidence*) • In chronic wounds infected with *P. aeruginosa* biofilm (n=3), significantly higher sensitivity to antibiotic treatment as measured by microbial counts was sustained for 24 hours following debridement (p<0.05), but sensitivity decreased to non-significant levels by 48 hours and returned to pre-debridement levels within 72 hours.[12] (*Indirect evidence*) **Strength of evidence: B2 - Level 3 or 4 studies (regardless of quality) providing direct evidence**	

	CRITERIA	JUDGEMENTS	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
RESOURCE USE	**How substantial are the resource requirements?**	Not clear: ☒ Not sub-stantial: ☐ Probably not sub-stantial: ☐ Probably sub-stantial: ☐ Sub-stanital: ☐ Varies: ☐	• In one analysis (n=557 pressure injuries) debridement with CCO was associated with a lower cost over one year (mean difference –$988, 2016 US dollars) compared with autolytic debridement with honey but the difference was not significant (US dollars in 2017).[39] (*High quality economic analysis*) • A cost analysis of debridement for pressure injuries (n=434) reported that CCO had fewer costs compared with sharp debridement ($11,151 vs $17,596/wound). For each additional ulcer-free week attained with CCO debridement there was a concurrent cost saving of $375[40] (USD, 2017) (*Moderate quality economic analysis*) • Cost analysis based on results from a small Level 1 study (n=27) estimated the cost per granulation day was approx. 3.2 times higher for hydrogel ($249) vs CCO ($78) (USD in 2013).[15] (*Moderate quality economic analysis*) • Cost analysis based on results from a small Level 1 study (n=24) reported average costs per pressure injury over 14 weeks was approximately 5% higher with hydrocolloid than with CCO (Netherlands, 2001).[41] *(Low quality economic analysis*)	
PRIORITY AND ACCEPTABILITY	**Is the option acceptable to key stakeholders?**	No: ☐ Probably No: ☐ Uncertain: ☒ Probably Yes: ☐ Yes: ☐ Varies: ☐	In chronic wounds, 22.6% of which were pressure injuries (n=39), individuals rated pain associated with debridement with hydrosurgery as less than five on a ten point scale when analgesia was used (e.g. topical lidocaine, block anesthesia and systemic analgesia etc.)[42] (*Indirect evidence*)	
	Is the option a priority for key stakeholders?	No: ☐ Probably No: ☐ Uncertain: ☒ Probably Yes: ☐ Yes: ☐ Varies: ☐	No evidence available	
FEASIBILITY	**Is the option feasible to implement?**	No: ☐ Probably No: ☐ Uncertain: ☐ Probably Yes: ☐ Yes: ☐ Varies: ☒	• Accessibility to products required for some forms of debridement may be limited in some geographic regions, limiting the types of debridement that might be considered (*Expert opinion*). • Conservative sharp debridement and surgical/sharp debridement must be performed by specially trained, competent, qualified, and licensed health professionals consistent with local legal and regulatory statutes (*Expert opinion*). • Debridement with a monofilament pad took approximately four minutes to fully reveal the wound bed.[43] (*Level 4, low quality*) • In chronic wounds, 22.6% of which were pressure injuries (n=39), debridement with hydrosurgery required only one session for 73.6% of wounds.[42] (*Indirect evidence*)	

Balance of consequences	Undesirable consequences *clearly outweigh* desirable consequences in most settings	Undesirable consequences *probably outweigh* desirable consequences in most settings	The balance between desirable and undesirable consequences *is closely balanced or uncertain*	Desirable consequences *probably outweigh* undesirable consequences in most settings	Desirable consequences *clearly outweigh* undesirable consequences in most settings
	☐	☐	☐	☒	☐
Strength of recommendation	Strong negative recommendation: Definitely don't it	Weak negative recommendation: Probably don't do it	No specific recommendation	Weak positive recommendation: Probably do it	Strong positive recommendation: Definitely do it
	☐	☐	☐	☐	☒

Justification

There is strong informed clinical consensus to support the role of debridement in wound bed preparation, despite the ethically understandable lack of randomized controlled trials directly comparing debridement to no debridement in human subjects.[8,23-31,33-38,44] Direct evidence on debridement primarily offers comparisons between different types of debridement rather than demonstrating that debriding a wound is more effective than not performing debridement. One study provided indirect evidence that sharp debridement is effective in increasing susceptibility of wound bacteria in chronic wounds to antibiotic therapy for short periods (up to 72 hours).[17] One high quality Level 3 study[17] demonstrated improvement in wound condition reported on the Bates-Jensen Wound Assessment Tool (BWAT) with enzymatic debridement compared to no debridement or sharp debridement (it was unclear how many controls received no debridement in the study).

Comparisons between different types of debridement generally demonstrate no statistically significant differences between methods. One low quality Level 1 study,[15] and one low quality Level 3 study[16] demonstrated that enzymatic debridement is as effective as autolytic debridement and sharp debridement in achieving improvements in wound surface area. Two high quality Level 3 studies[17,18] also demonstrated enzymatic debridement is associated with improvements in wound condition (increase in granulation tissue and improvement in scores on a BWAT). Three low Level 1 studies[19-21] provided evidence that autolytic debridement with different dressings are as effective as each other and other forms of debridement in achieving improvement in pressure injury condition. A number of small economic analyses of high,[39] moderate[15,40] and low[41] quality indicated that enzymatic debridement may be a more cost effective debridement method, but this finding is influenced by geographic location, clinical setting and duration of use.

One study in wounds of different etiologies provided indirect evidence that debridement weekly or more frequently was associated with increased hazard ratios for healing when compared with less than weekly debridement (HR = 4.26 (95% CI 4.20 to 4.31).[22] Additional indirect evidence indicated that wound bacterial sensitivity to antibiotics decreases to non-significant levels by 48 hours and returns to pre-debridement levels within 72 hours,[12] suggesting maintenance debridement Is required to treat biofilm.

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