Table 10: Types of debridement

Method	Description	Advantages	Considerations
Surgical	Performed in the operating room or specialised clinic by qualified and competent practitioners using sterile scalpel, scissors or a hydrosurgical device.[1-4]	• Fast and efficient • Maximises asepsis.[5] • Disrupts biofilm and removes foci of infection.[6] • If adequate tissue is removed, deeper biofilm can be disrupted.[2]	• Non-selective • Requires a general or local anaesthetic. • Will result in bleeding • Expensive
Sharp	Performed by qualified and competent practitioners (e.g., medical practitioner, podiatrist, advance practice nurse) using sterile scalpel, scissors or curette.[1, 2, 4]	• Fast and efficient. • Disrupts biofilm and removes foci of infection.[6] • If all non-viable tissue is removed, deeper biofilm can be disrupted.[2]	• May require a local anaesthetic. • May result in bleeding • Limited selectivity, can reduce effectiveness if foci is not disrupted.[7]
Conservative-sharp	Performed by qualified and competent practitioners using aseptic technique with sterile curette, scalpel and scissors.[1, 2]	• Removes and disrupts superficial biofilm.[2]	Limited selectivity as aims to remove loose avascular or infected tissue without pain or bleeding.[5, 8]
Autolytic	Autolytic debridement occurs naturally and can be aided by using topical agents and contemporary wound dressings that promote autolysis.[1, 2, 9-11] Examples include: • Cadexomer iodine • Fibre gelling wound dressings (e.g., alginates, hydrofibre, polyabsorbent fibers) • Honey • Moisture balancing wound dressings (e.g., hydro-responsive wound dressings). • Surfactant and antiseptic solutions/gels.	• Highly selective • Inexpensive • Varying effectiveness in controlling biofilm • Pain free, no bleeding. • Antimicrobial autolytic agents aid infection control. • Polyabsorbent fibers have a continuous cleaning action.[10]	• Slow • May cause maceration or irritation of surrounding skin.
Mechanical	Debridement performed using:[2, 4, 12-15] • Wet-to-dry dressings • Therapeutic irrigation • Monofilament /microfibre/foam debridement pads • Low-frequency ultrasound • Moistened gauze with aggressive circular contact	• Evidence of disruption and removal of biofilm.[2, 15] • Wet-to-dry dressings and irrigation is inexpensive. • Debridement pads may improve patient comfort[16]	• Non-selective • Wet-to-dry dressings are painful and can lead to wound bed trauma. • Some mechanical debridement options are expensive.
Enzymatic	Application of exogenous enzymes to the wound surface.[2, 17]	• Selective • Potentially some level of biofilm disruption/removal.[2]	• Slower than instrument or other mechanical methods. • May cause maceration or irritation of surrounding skin. • Not be widely available. • Can be used as an adjunct to surgical debridement.[17]
Chemical/ mechanical/ surfactant	Use of high or low concentration surfactant wound cleaners and gels that disrupt non-viable tissue, debris and microbials.[18]	• Selective • Inexpensive • Some level of biofilm disruption/removal.[2] • May augment mechanical	• Slower than other debridement methods • Some contain antimicrobial agents or active preservatives

Table 10: Types of debridement			
Method	**Description**	**Advantages**	**Considerations**
		removal of debris when combined with negative pressure wound therapy.[19]	• May cause maceration of periwound and surrounding skin, consider use of barrier products.
Biosurgical/ larvae therapy	Medical grade fly larvae (e.g., *Lucilia sericata sp* and *Lucilia cuprina*) produce proteolytic enzymes that liquify devitalised tissue, which is then ingested by the larvae.[1, 4, 20, 21]	• Selective • Fast and efficient • Lysis of organisms • Evidence of removal of biofilm *in vitro* and in clinical studies.[22, 23]	• Slight pyrexia may occur because of lysis of organisms by larvae. • Skin irritation may occur if enzymes contact surrounding skin. • May be unacceptable to the patient.[5]

Table 10 References

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