HotDoc | CPD WEBINAR

Wound Care in General Practice Update

HOSTED BY

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aapm
Australian Association of Practice Management
excellence in healthcare management

AAPM Approved 2025
5 CPD Points

Wed 30th July
12:30pm AEST

In the spirit of reconciliation, HotDoc acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community.

We pay our respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

Before we begin -

- This session is being recorded & you will be sent a link 4-6 hours after this session has concluded with the recording & resources.
- Use the Q&A tool on your screen to submit a questions through the session & we will address at the end. If we don't get a chance to address during the LIVE session, we will reach out to you afterwards to discuss further.
- In the "related content" you'll find our further feedback form.
- Your certificate will be accessible at anytime, you can access via the  certificate icon on your console.
- Have a play around with the console/ icons on your screen, it's an interactive experience.
- Please take some time to complete our feedback survey to let us know what you thought of today's session.

Wound Management in General Practice

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In 45-60 minutes there is no way to cover all the complex aspects of wound management

Topics to be covered

- How wounds heal
- What can go wrong and why
- Products you should have
- Skin tears
- Ulceration lower legs
- And with any luck a few minutes for questions!!

The overarching principles in wound management are:

1. Understand how the wound commenced and what type of wound this may be—give it a name for its type
2. Look at the ‘whole’ patient and decide what factors may be influencing healing
3. Select appropriate dressing or device-according to tissue type, volume and type of exudate, depth and aim (there may be other things to consider)
4. Once healed revisit aetiology to ensure all prevention strategies have been addressed

FOUR FACTORS THAT IMPROVE HEALING RATES:

Frequent Wound Care

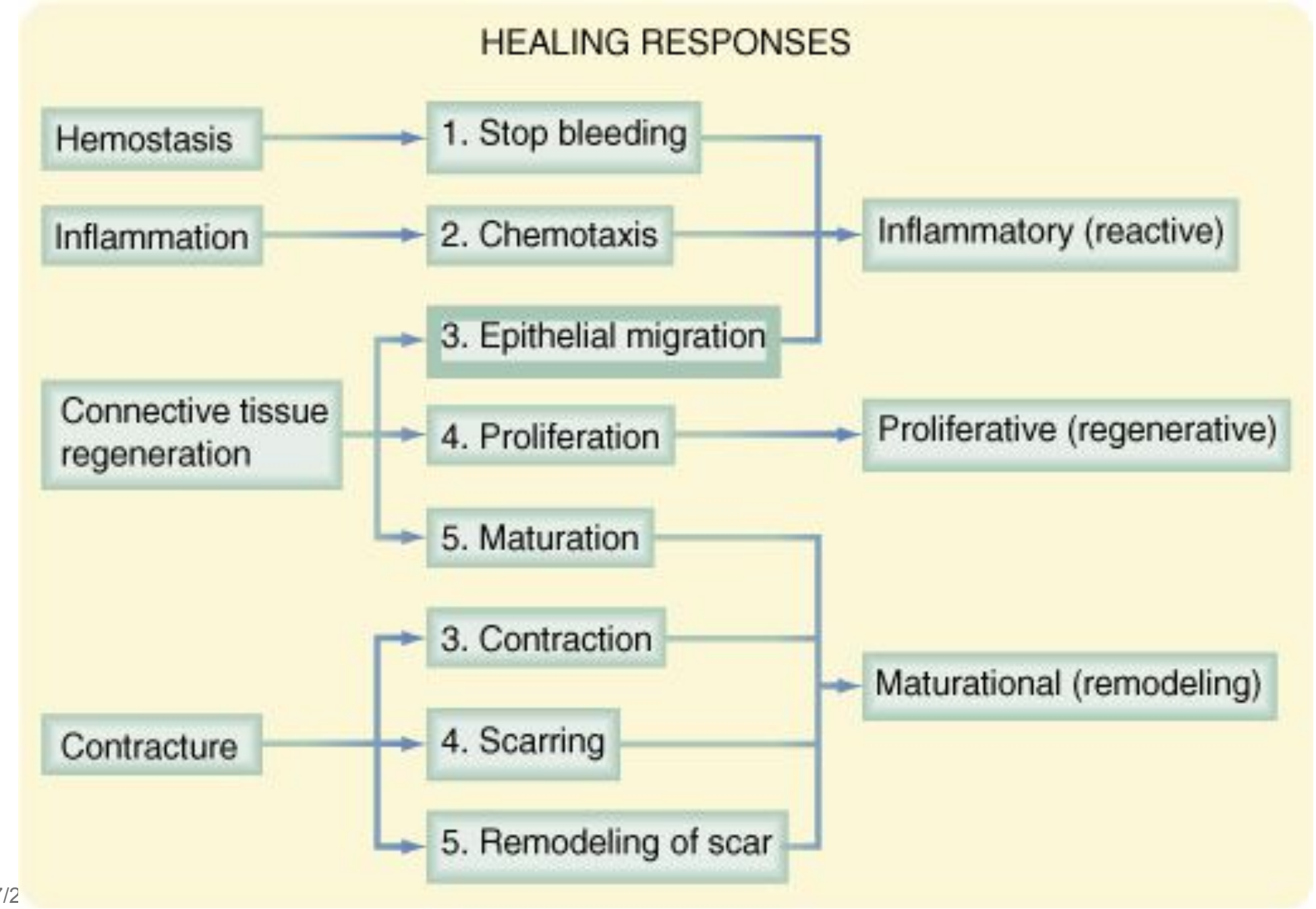
Consistent Healing Progress

Involved and Committed Patients

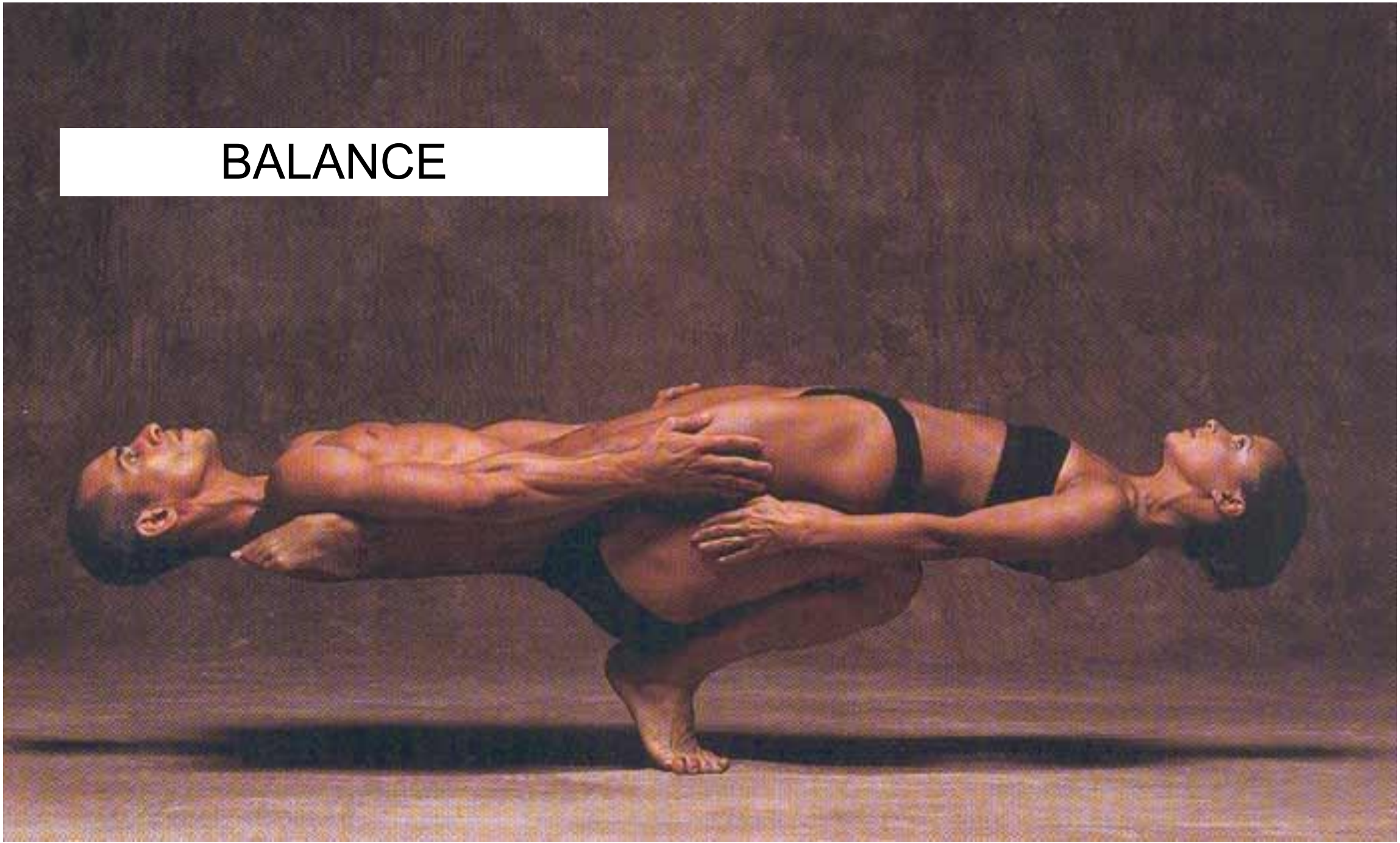
Advanced Wound Care Treatments

Before jumping in to select a dressing .....

- Very important to take a history of the wound
- Look at the past medical and surgical histories
- Look at medications being taken
- Have some understanding of the person with the wound-know your patient


HEALING RESPONSES
Hemostasis
1. Stop bleeding
Inflammation
2. Chemotaxis
Inflammatory (reactive)
3. Epithelial migration
Connective tissue regeneration
4. Proliferation
Proliferative (regenerative)
5. Maturation
3. Contraction
Contracture
4. Scarring
Maturational (remodeling)
5. Remodeling of scar

BALANCE



Balance……

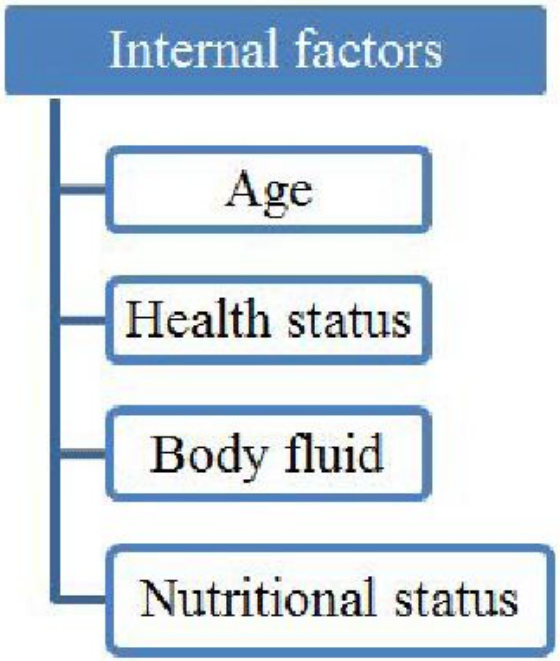
- Too much inflammation causes delay
- Too little inflammation cause to delay
- Too many microbes may lead to issues
- Too much moisture can cause issues
- Too dry a wound may be problematic……..

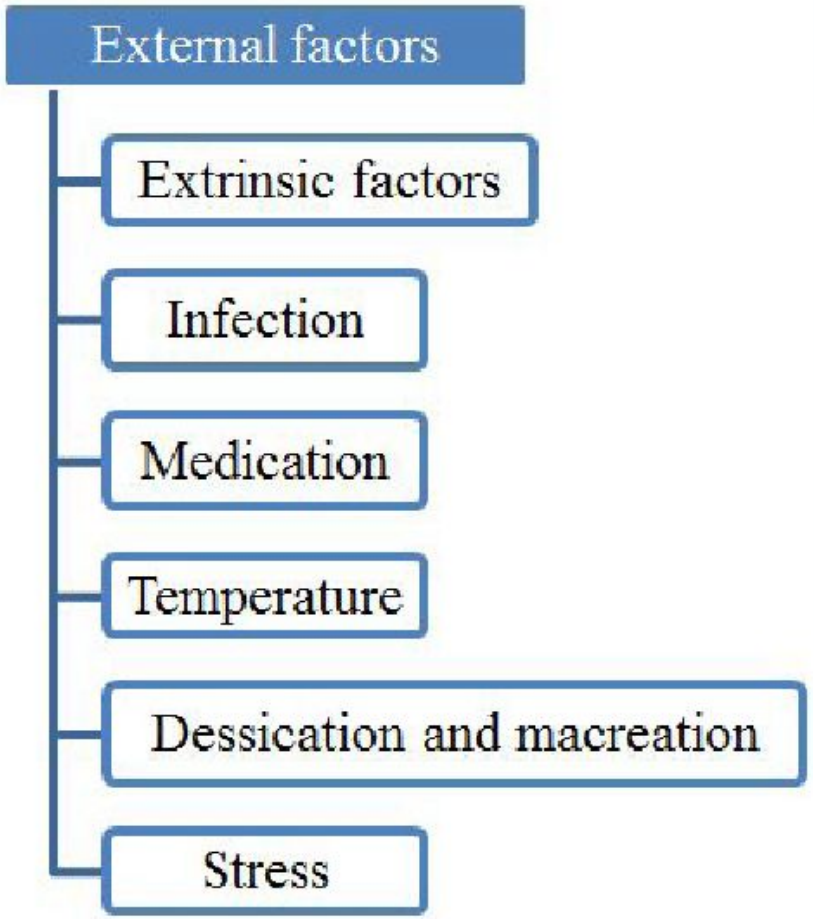
Wounds seen in General Practice

- Trauma-- abrasions and cuts, skin tears
- Superficial partial thickness burns
- Venous leg ulcers
- Arterial leg ulcers
- Foot wounds often associated with neuropathy and neuro-ischaemia
- Skin cancers

Generally do not see –Pressure injuries or dehisced surgical wounds

Factors influencing wound healing

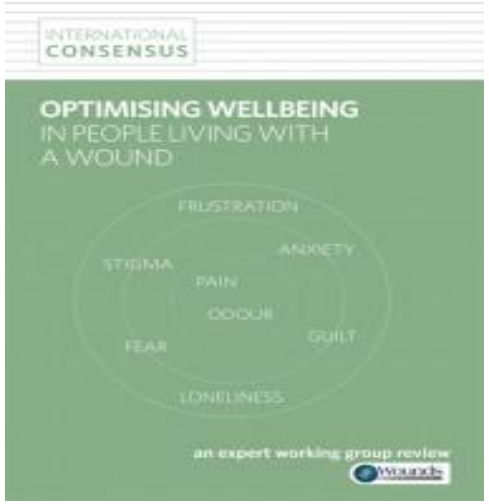




• Local factors	Systemic factors
• 1.Oxygenation	1. Age and gender
• 2.Infection	2. sex hormones
• 3.foreign body	3. Stress
• 4.Venous sufficiency	4. Ischemia
	5. Diabetes,
	6 .Obesity
	7 .Medication
	8 . Alcoholism and smoking
	9 . nutrition

Documents to consider reading

www.ewma.org



www.woundsinternational.com

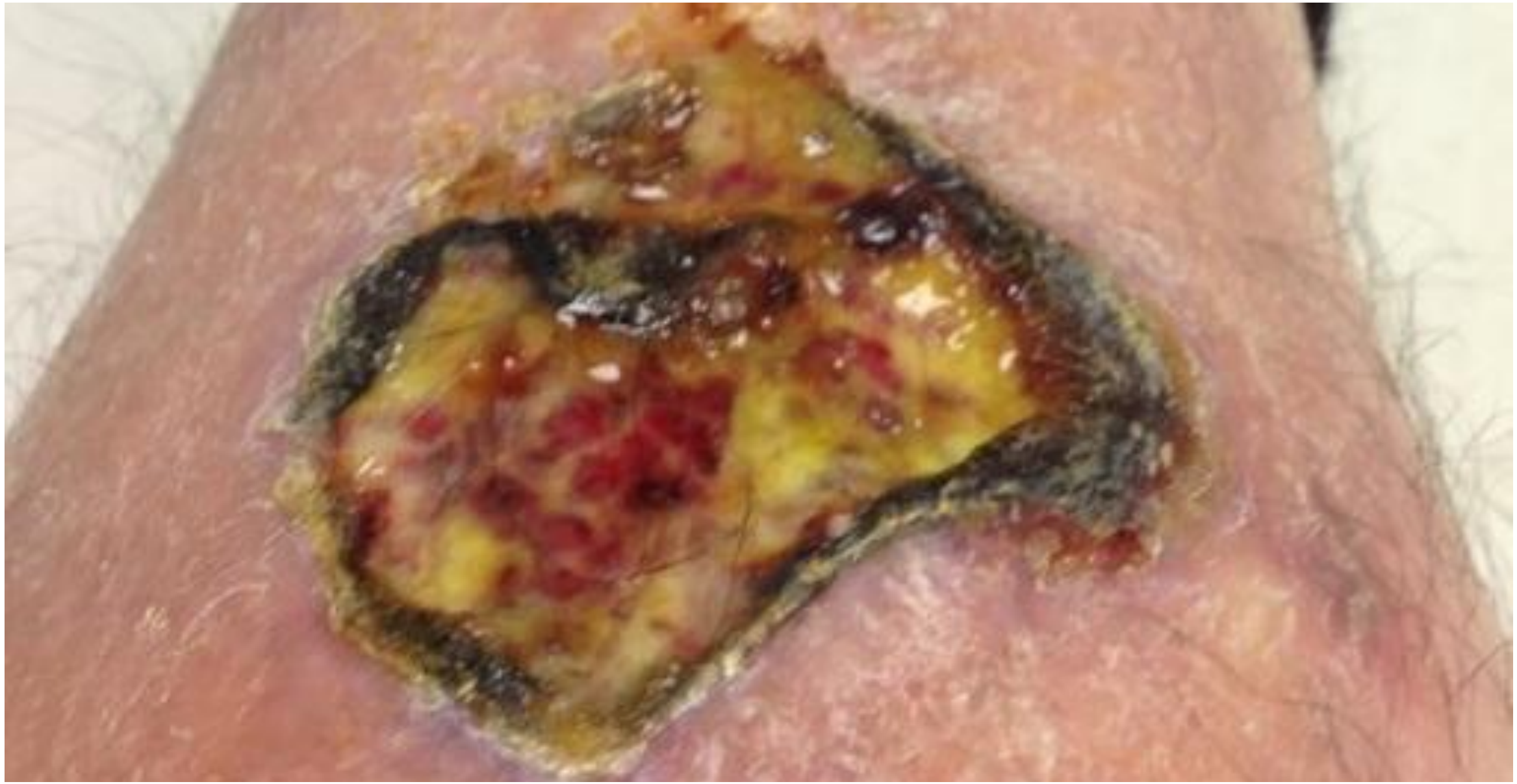
Mental State

- Evidence shows that patients perception of

  their illness directly relates to how they progress
- Depressed patients heal more slowly
- Motivation is a big factor in healing---the power of the mind…the placebo effect.. we still have much to learn in this field

Lifestyle Factors

- Smoking decreases peripheral blood supply by 50% for one hour after just one cigarette
- Excessive alcohol consumption is also linked to poor healing rates… possibly due to malnutrition linked with alcoholism



www.international.wound-infection.institute.com

Summary of recommendations

- 1. Therapeutically cleanse all wounds when the wound dressing is changed or removed
- 2. Therapeutically cleanse the wound bed and wound edge and the periwound skin with an inert wound cleanser prior to collecting a wound or tissue sample for microscopy, culture and sensitivity
- 3. Therapeutically cleanse the wound bed and wound edge, the periwound skin and the surrounding skin when the wound dressing is changed or removed
- 4. Select either sterile/surgical aseptic technique or clean/standard aseptic technique when performing a wound dressing procedure. Conduct a risk assessment that considers the individual, the wound and environmental considerations to guide technique selection
- 5. Implement universal precautions when conducting a wound dressing procedure

Summary of recommendations continued..

- 6. Assess the individual, the wound and the environment to determine whether it is appropriate to cleanse a postoperative or hard-to-heal wound in a shower
- 7. Select a wound cleansing solution based on: • The type of wound dressing procedure and therapeutic cleansing technique that will be performed • Characteristics of the wound • The risk and/or presence of infection • The abundance and profile of microorganisms in the wound (where known) • Cytotoxicity, pH and allergenicity of the solution • Goals of care and other individual factors (e.g. immunocompromised) • Local policies, resources and availability
- 8. Use a wound cleansing solution with antimicrobial properties as part of a comprehensive wound infection management plan when wound infection is confirmed or suspected.

Summary of recommendations continued..

- 9. Do not use a microwave to heat wound or skin cleansing solutions.
- 10. Therapeutically cleanse the skin using a mild skin cleanser with a pH close to normal skin.
- 11. Select a wound cleansing technique based on the following: • Presentation of the wound bed and wound edges, including signs and symptoms of wound infection, as outlined on the IWII Wound Infection Continuum • Presentation of the periwound • Presentation of the surrounding skin • Goals of care and other individual factors (e.g. pain experience) • Local policies and resources.

Summary of recommendations continued..

- 12. Therapeutically cleanse the surrounding skin and periwound first
- 13. Therapeutically cleanse the wound bed from the most vulnerable to least vulnerable regions, based on assessment of the wound
- 14. Adjust wound cleansing techniques and implement pain management strategies according to the individual’s pain experience

Proposed definition of Therapeutic wound cleansing

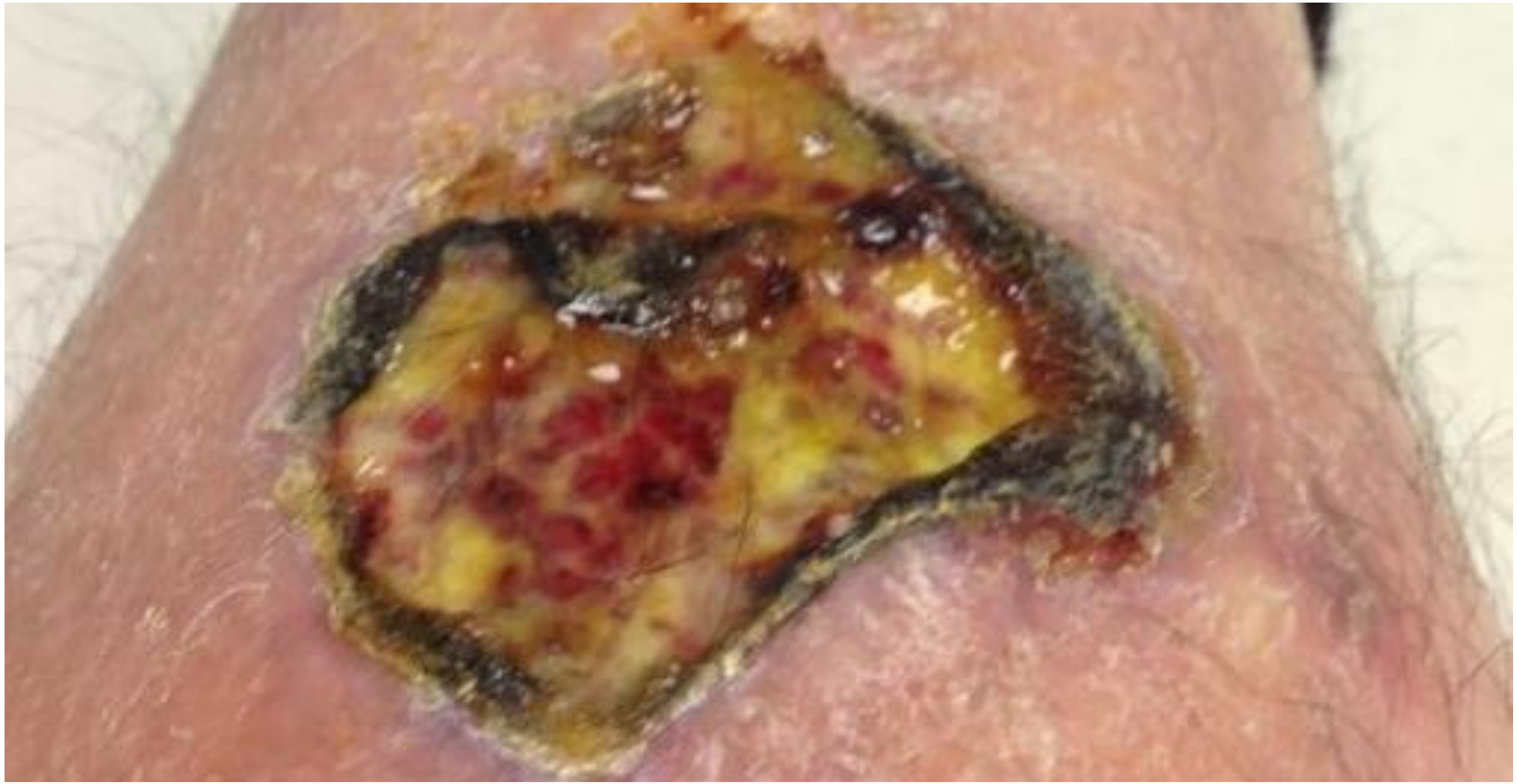
- The term therapeutic wound cleansing refers to the **active removal of surface contaminants, loose debris, non-attached non-viable tissue, microorganisms and/ or remnants of previous dressings from the wound bed and periwound**

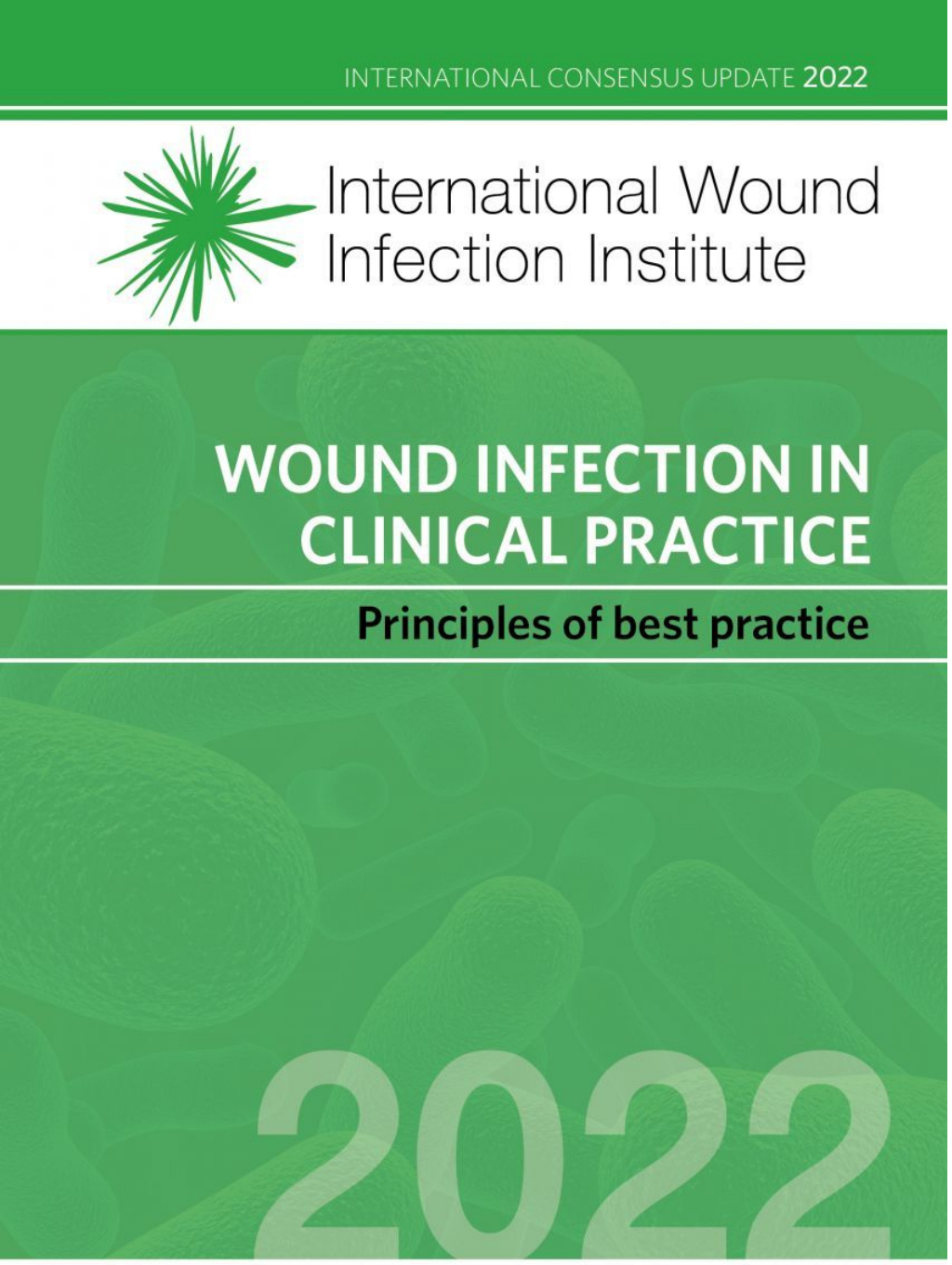
Cont.

- Therapeutic wound cleansing is a fundamental component of the process that is undertaken to prepare the wound bed for healing and the application of treatment such as wound dressings
- The process involves the targeted removal of undesirable surface contaminants (e.g. exudate), loose debris, non-attached non-viable tissue, microorganisms and/or remnants of previous dressings from both the wound bed and periwound using a wound cleansing solution and mechanical action
- Therapeutic wound cleansing is closely aligned with, but different from, general skin hygiene and washing the surrounding skin

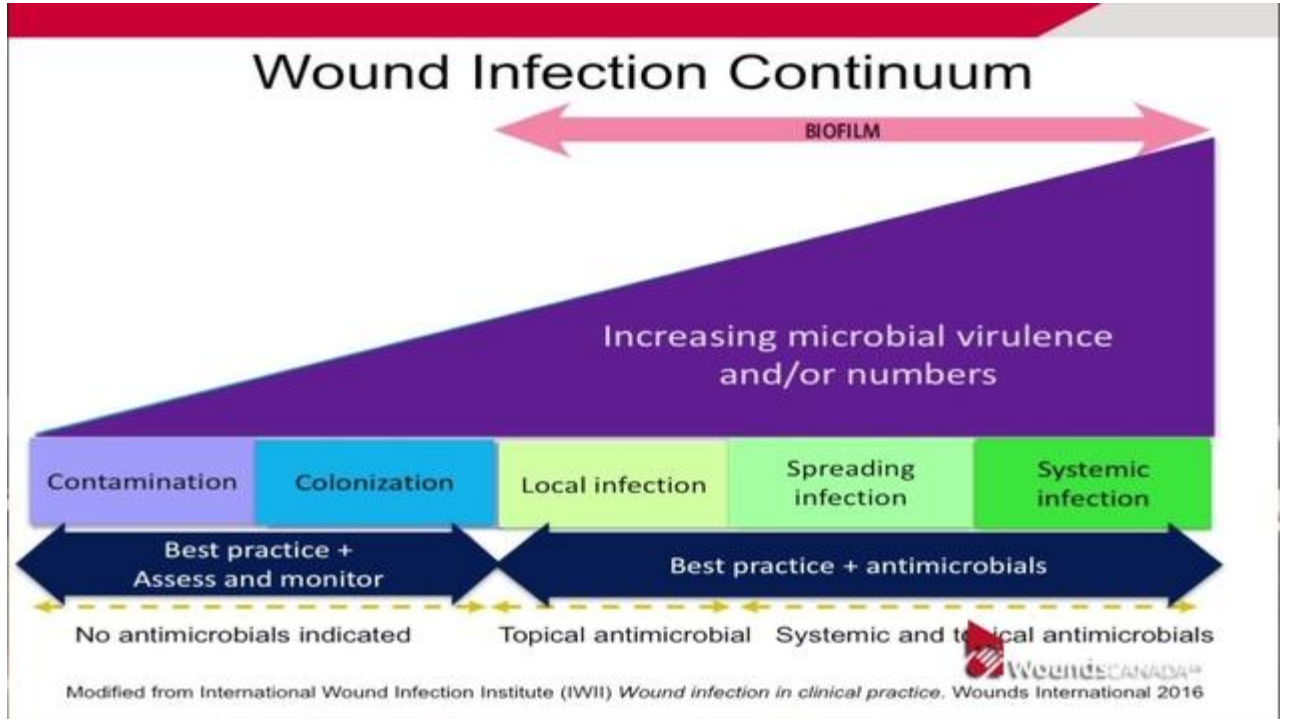
Cont.

- Therapeutic wound cleansing is only one component of the recognised best practice approach to preparing the wound bed for healing
- Several steps are undertaken as part of the wound care process. This process, which occurs during a wound dressing procedure, has had several names over the years, including wound bed preparation (WBP), TIME (tissue, infection/inflammation, moisture balance, wound edge), biofilm-based wound care (BBWC), TIMERS (tissue, infection/ inflammation, moisture balance, wound edge, regeneration and social factors) and more recently, Wound Hygiene

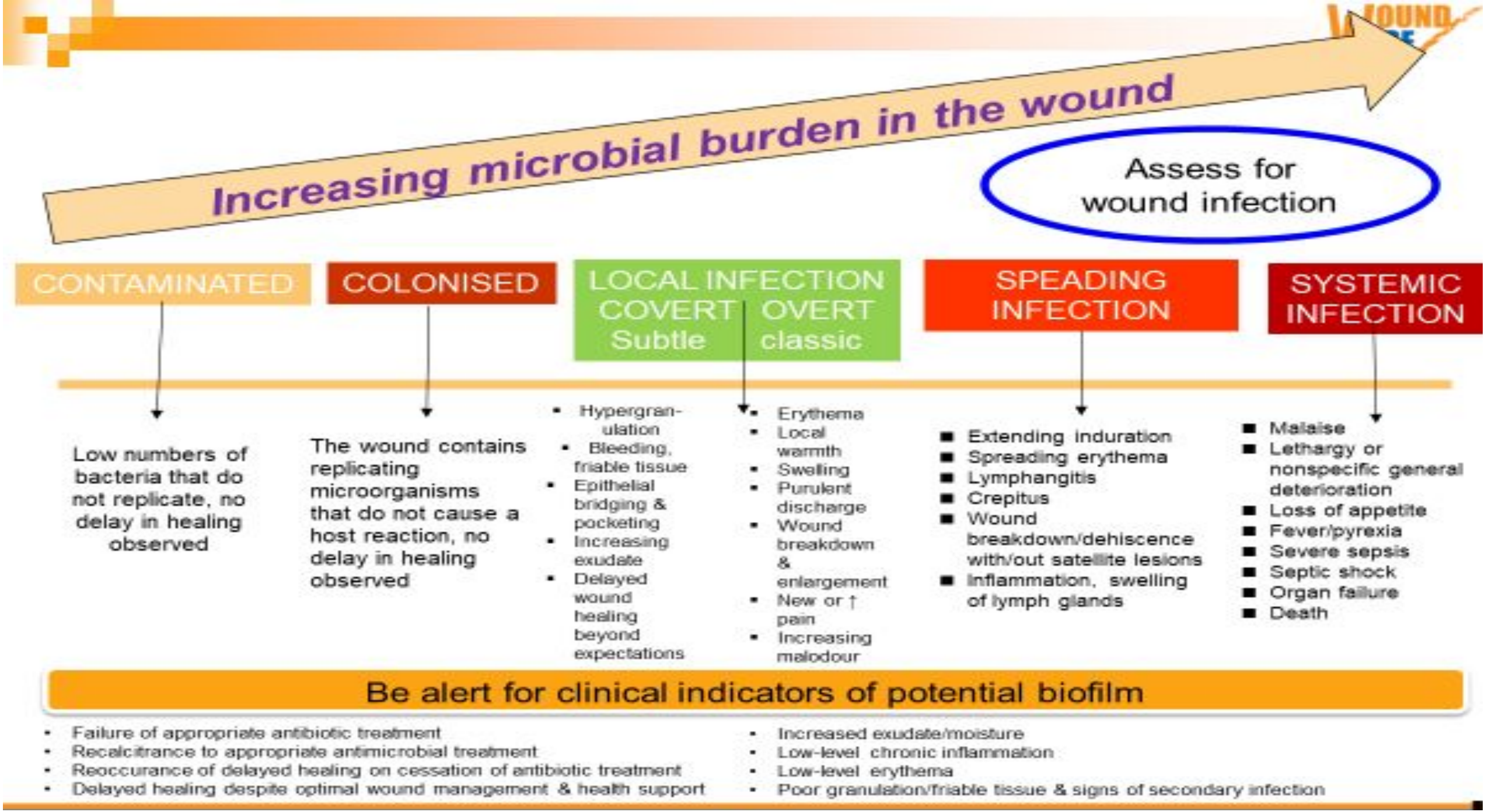




www.woundinfection-institute.com



Contamination[26]	Colonisation[26]	Local infection		Spreading infection[22, 23]	Systemic infection[22, 23]
All wounds may acquire micro-organisms. If suitable nutritive and physical conditions are not available for each microbial species, or they are not able to successfully evade host defences, they will not multiply or persist; their presence is therefore only transient and wound healing is not delayed	Microbial species successfully grow and divide, but do not cause damage to the host or initiate wound infection	Covert (subtle) signs of local infection:[2, 27-36] ■ Hypergranulation (excessive 'vascular' tissue) ■ Bleeding, friable granulation ■ Epithelial bridging and pocketing in granulation tissue ■ Wound breakdown and enlargement ■ Delayed wound healing beyond expectations ■ New or increasing pain ■ Increasing malodour	Overt (classic) signs of local infection:[2, 27, 28, 35, 36] ■ Erythema ■ Local warmth ■ Swelling ■ Purulent discharge ■ Delayed wound healing beyond expectations ■ New or increasing pain ■ Increasing malodour	■ Extending in duration +/- erythema ■ Lymphangitis ■ Crepitus ■ Wound breakdown/ dehiscence with or without satellite lesions ■ Malaise/ lethargy or non-specific general deterioration ■ Loss of appetite ■ Inflammation,	■ Severe sepsis ■ Septic shock ■ Organ failure ■ Death



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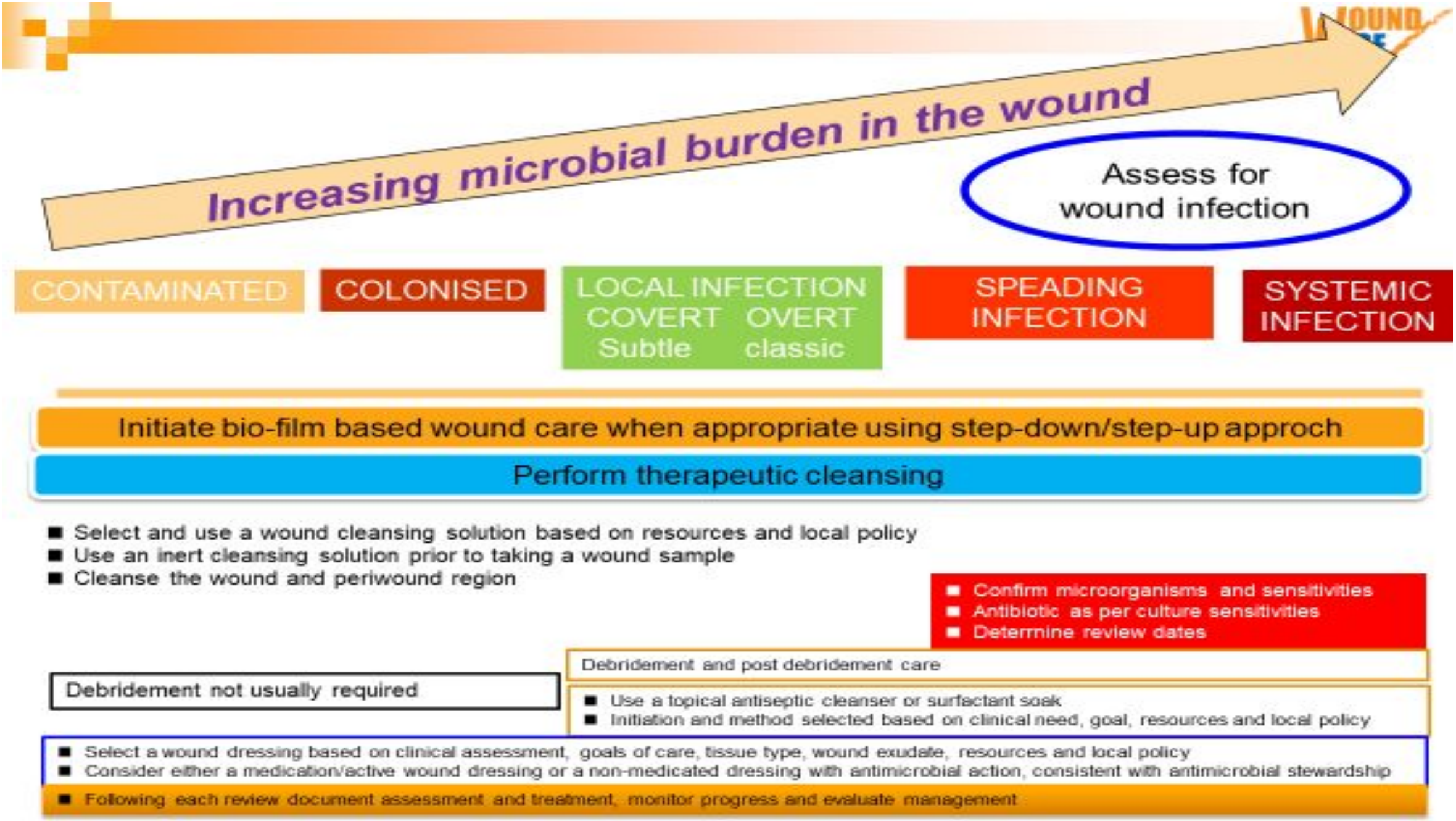


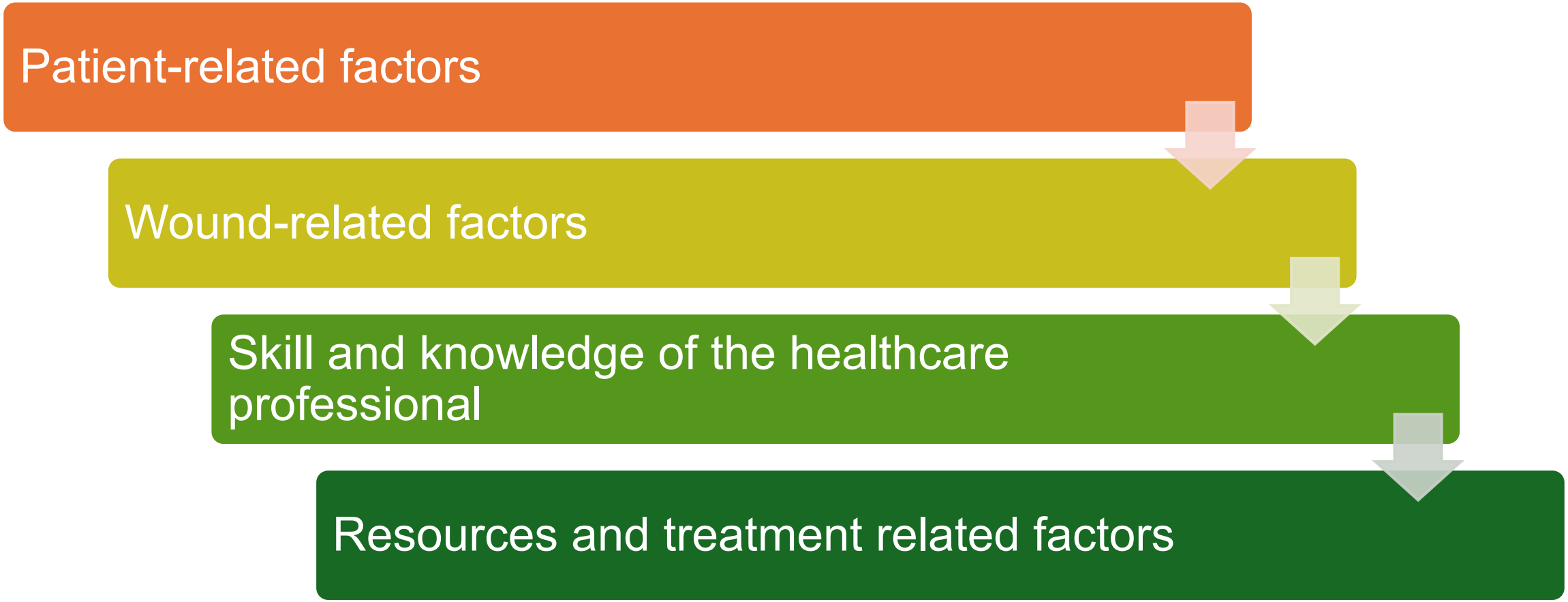
Slide Developed by Melinda Brooks


After considering infection in all its forms then think about nutrition

Products by function

- Wound protection products
- Wound re-hydration/donation products
- Moisture retention products
- Exudate management products
- Wound debridement products
- Antimicrobials
- Skin care/protection products
- Cleansers/surfactants

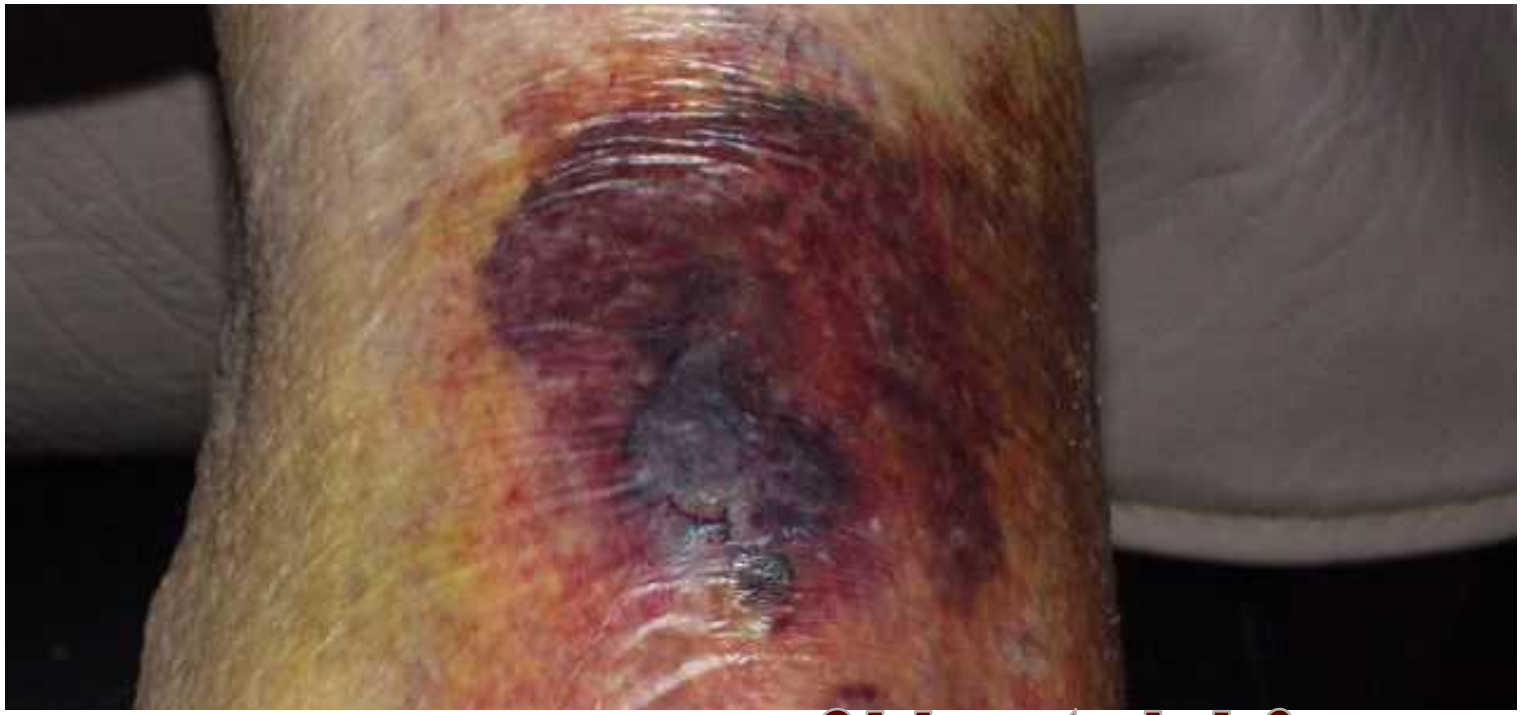
Problem solving using 4 broad categories



Investigations

- Wound swab
- Wound tissue biopsy
- Xray
- Bone scan
- MRI or CT scan
- Sinugram
- Hand held Doppler for calculating ABPI
- Arterial or venous duplex scan

Skin tears



Skin at risk?

STAR Skin tear Classification system

SILVER CHAIN

STAR Skin Tear Classification System

Curtin University of Technology

STAR Skin Tear Classification System Guidelines

1. Control bleeding and clean the wound according to protocol.
2. Realign (if possible) any skin or flap.
3. Assess degree of tissue loss and skin or flap colour using the STAR Classification System.
4. Assess the surrounding skin condition for fragility, swelling, discolouration or bruising.
5. Assess the person, their wound and their healing environment as per protocol.
6. If skin or flap colour is pale, dusky or darkened reassess in 24-48 hours or at the first dressing change.

STAR Classification System

Category 1a
A skin tear where the edges **can** be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour **is not** pale, dusky or darkened.

Category 1b
A skin tear where the edges **can** be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour **is** pale, dusky or darkened.

Category 2a
A skin tear where the edges **cannot** be realigned to the normal anatomical position and the skin or flap colour **is not** pale, dusky or darkened.

Category 2b
A skin tear where the edges **cannot** be realigned to the normal anatomical position and the skin or flap colour **is** pale, dusky or darkened.

Category 3
A skin tear where the skin flap is completely absent.

Skin Tear Audit Research (STAR). Silver Chain Nursing Association and School of Nursing and Midwifery, Curtin University of Technology. Revised 15/1/2007.

So skin must be maintained at an adequate hydration-not dry –not wet

- Apply moisturizers twice per day—best time to apply is immediately after a shower and prior to bed—generally arms, legs and feet are the only areas that require this but sometimes all body is required
- Ensure fluids are offered as often as they are possible unless on fluid restrictions
- Ensure fans and heaters are adjusted as the climate dictates
- Remember air conditioning, fans and heaters will dry the skin, so more fluids may be required
- If applying the moisturizers and the skin is dry by lunchtime then you need to report this to the RN as a better quality product may be required

Managing skin tears with Adaptic Touch™ Dressing made easy

Wounds International

© Wounds International | November 2018 www.woundsinternational.com

Introduction

Skin tears are a significant problem for those with fragile skin but with appropriate skin management, they are mostly, although not always, preventable. The frequency and prevalence of skin tears, and thus the economic and patient burden, is believed to be under-reported.

An understanding of what is a skin tear, how they occur, how they can be avoided and the appropriate management of skin tears is an important consideration for practitioners who manage at-risk groups. This Made Easy covers the assessment, diagnosis and management of skin tears, as well as risk assessment and prevention of future skin tears. There are a range of products and dressing types that are suitable for the management of skin tears, here, products from the KCI – an Acelity company dressing portfolio have been used as examples.

Authors: Dawn Christensen[1], Alita Jaspar[2]

What are skin tears?

The International Skin Tear Advisory Panel (ISTAP) defines skin tears as: "A skin tear is a traumatic wound caused by mechanical forces, including removal of adhesives. Severity may vary by depth (not extending through the subcutaneous layer)..." (LeBlanc et al, 2018). Skin tears can occur anywhere on the body, but most often occur on the upper and lower limbs, especially the hand and foot (LeBlanc and Baranoski, 2011).

Skin tears can be very painful and distressing for the patient (Herbert, 2016; Wound Care Advisor, 2016), can often be prevented, and are often wrongly considered to be minor or straight-forward injuries. Skin tears are susceptible to infection, complications and delayed healing, especially if the patient has related comorbidities. If skin tears fail to achieve expected healing within 4 weeks, it should be considered a chronic wound (LeBlanc et al, 2018), which can place a considerable burden on healthcare resources (Holloway and LeBlanc, 2016).

What are the prevalence and incidence of skin tears?

There are few incidence studies available on skin tears and the reported prevalence estimates vary widely between and within care settings (LeBlanc et al, 2018) and across countries (Holloway and LeBlanc, 2016). One US study reported 1.5 million skin tears affect in-patients every year (Wound Care Advisor, 2016). However, what is clear is that skin tears are often underreported or misdiagnosed. There is some evidence that they may be more common than pressure ulcers (Carville and Smith, 2004), so the full economic and practical burden is unclear.

What are the risk factors associated skin tear?

A recent international consensus group developed consensus guidelines for the prevention and management of skin tears in aged skin (LeBlanc et al, 2018). Skin tears are caused by a combination of intrinsic (patient) and extrinsic (environmental) factors; it is important to define the exact cause of the wound for documentation and to avoid recurring skin tears:

- Blunt trauma
- Falls
- During activities of daily living (ADLs), such as dressing
- Dressing/treatment related
- During patient transfer or as a result of equipment injury (e.g. with a wheelchair, mobility aids, side-rail, bed).

Intrinsic risk factors

Fragile skin is a major risk factor associated with skin tears. As skin ages, it has a reduced ability to regenerate, loses moisture, and becomes drier, which results in reduced skin integrity. These changes, coupled with a less efficient immune system, means that older patients are at an increased risk of skin breakdown, even from minor force or trauma (Voegeli, 2007; LeBlanc et al, 2018).

Extrinsic/environmental risk factors

Extrinsic risk factors can be alleviated and avoided. For the patient with vulnerable skin or their carer, measures can be taken to avoid the risk of skin tears, including:

- Keep fingernails trimmed
- Avoid wearing jewellery
- Pad or remove any potentially dangerous furniture or devices
- Cover the at risk person's skin with appropriate clothing
- Protect the skin's general integrity by using skin-friendly (pH-balanced) products and preventative emollients (Wounds UK, 2015; LeBlanc et al, 2018).

Skin tear risk assessment

Early recognition of people who are at risk of developing skin tears is an essential part of prevention. Skin tear risk assessment should follow a holistic approach and consider the patient, wound and environment (LeBlanc et al, 2013a; Wounds UK, 2015; Wounds International, 2017; LeBlanc et al, 2018). Risk

1

- www.woundsinternational.com

BEST PRACTICE DOCUMENT 2018

ISTAP BEST PRACTICE RECOMMENDATIONS

BEST PRACTICE RECOMMENDATIONS FOR

THE PREVENTION AND MANAGEMENT OF SKIN TEARS IN AGED SKIN

Recommendations from an expert working group

Wounds International

Timelines for skin tear healing

Category 1--- approximately 1-2 weeks

Category 2---- approximately 2-3 weeks

Category 3---- one month

So what can go wrong with the healing of a skin tear

- Further bleeding
- Too much exudate and hence the area is too moist
- Infection
- Wound is too slow to heal and so changes morphologically into a skin cancer
- Due to some other underlying disease the skin tear now converts into a venous or arterial leg ulcer or maybe even a vasculitic ulcer

Ulceration to lower legs

Getting the aetiology right

- Enquire about initiating factors
- Determine if there is any family history of leg ulcers
- Ask Pharmacist/LMO to review medications –particularly any that may precipitate lower leg oedema or delay healing
- Palpate foot and leg pulses if able
- Note the site, size & characteristics of the ulceration
- Enquire about previous treatments or any history of past ulcerations

Perform some laboratory tests

- Baseline blood levels
- Serum albumin
- Serum glucose
- ESR +/- CRP and other inflammatory markers
- ABPI (ankle brachial pressure index)
- Duplex scan
- Biopsy –for histopathology and micro pathology

Statistics

- Venous 70%
- Arterial 10%
- Mixed 10%
- Skin cancers 2%
- Others 8%

Venous ulcer characteristics

- Presence of firm ‘brawny’ oedema
- Leg takes on an inverted “champagne” bottle shape
- Ulcer has irregular edges/shape
- Ulcer begins on medial or lateral aspect lower third of lower leg
- Ulcer is wet, shallow with minimal necrotic tissue
- There may be atrophie blanche
- There may be venous eczema, staining and lipodermatosclerosis(LPD)
- Pulses are palpable, there is generally minimal pain especially when the leg is elevated

Lower gaiter region, medial or lateral

Standard venous leg ulcer treatment

- Zinc paste bandages
- Undercast padding or similar
- Tubifast™ or retention bandages
- Compression therapy –as tolerated by patient
- Leave insitu for one week if possible
- Aim to heal within 3-4 months, if not achieving good healing re-assess aetiology and factors influencing healing

Straight elasticated tubular bandages

Tubigrip Size Guide

CORRECT SIZE	WRIST	ELBOW	ANKLE	KNEE	THIGH	TORSO
A 10-12cm	CHILD LIMB					
B 12.5-14.5cm	SMALL	SMALL				
C 15-24cm	MEDIUM	MEDIUM	SMALL			
D 25-35cm	LARGE	LARGE	MEDIUM	SMALL		
E 36-44.5cm			LARGE	MEDIUM	SMALL	
F 45-50cm				LARGE	MEDIUM	
G 51-60cm					LARGE	
J small torso						SMALL
K medium torso						MEDIUM
L large torso						LARGE

6mmHg pressure at ankle

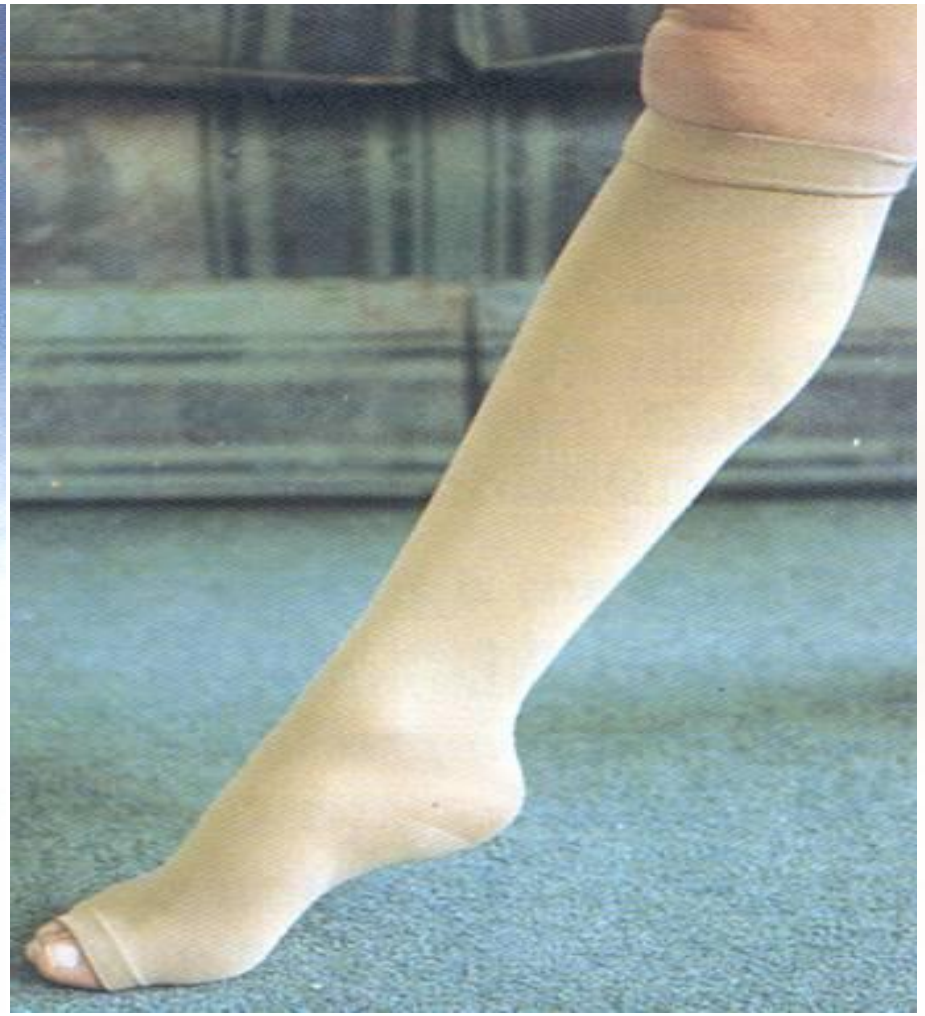
•Sub-bandage pressure difference of tubular form and short-stretch compression bandages: in-vivo randomised controlled trial Weller CD, Jolley D & McNeil J

Multi-layered compression bandages

- These deliver continuous sustained pressure over the week that they remains insitu.

These bandages are very well tolerated

Thigh high or knee high



Self adjustable wraps

Medirent-- www.medirent.com.au

Arterial ulcer characteristics

- Usually located between ankles and toes or high up on leg or posterior leg
- Deep, punched out regular shape, often dry
- Thin,shiny,non hair bearing skin
- Thickened toenails
- Diminished or absent foot pulses
- Elevation pallor, dependant rubor-(+ve Buergers test)
- Necrotic tissue, infection
- Pain, especially at night or when elevated

Arterial- deep, site of trauma, well defined edges, higher up on leg or posterior leg

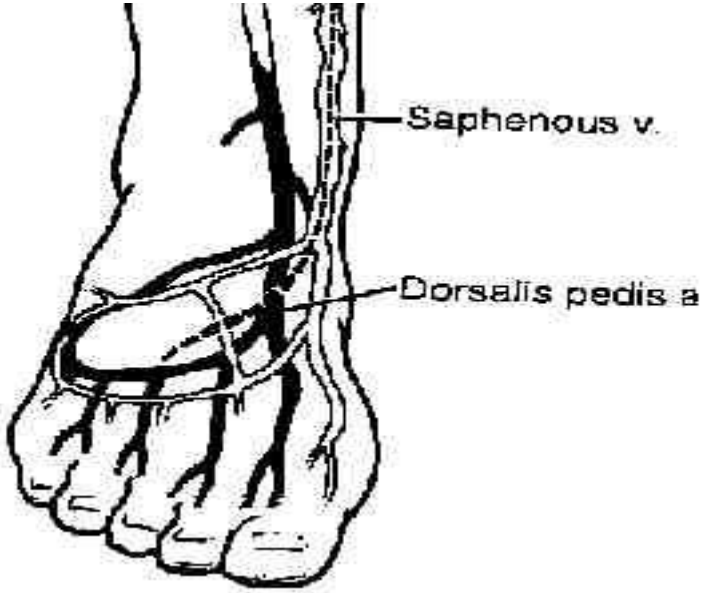
Treatment of arterial ulcers

Usually require antimicrobial coverage while waiting for Vascular surgeon

If necrotic and aiming to heal, **may** require debriding agent

If no possibility of healing then inert dressings—keep area dry and free of infection if possible—topical antimicrobials=e.g. Betadine lotion

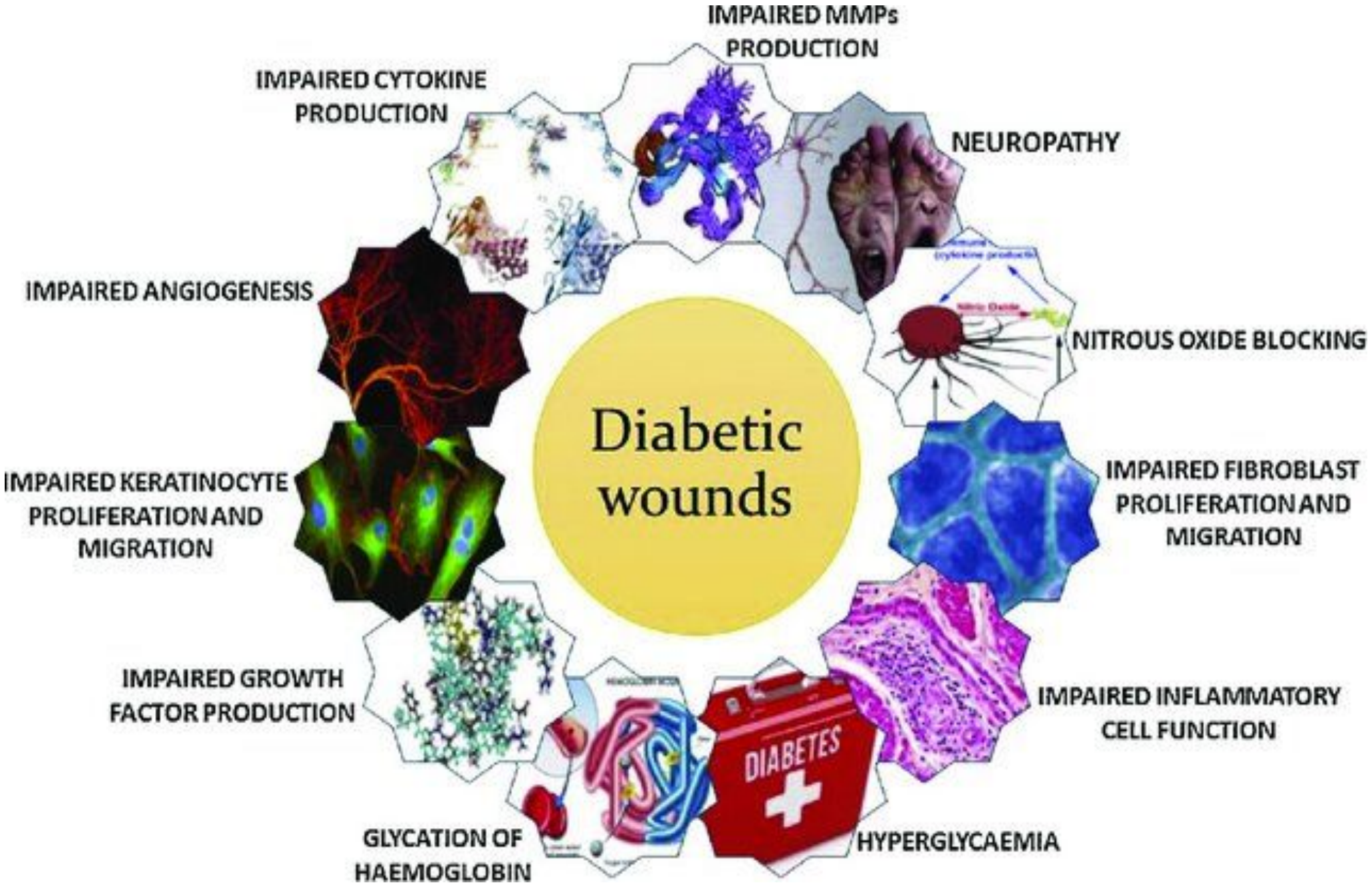
Feel for the pulses



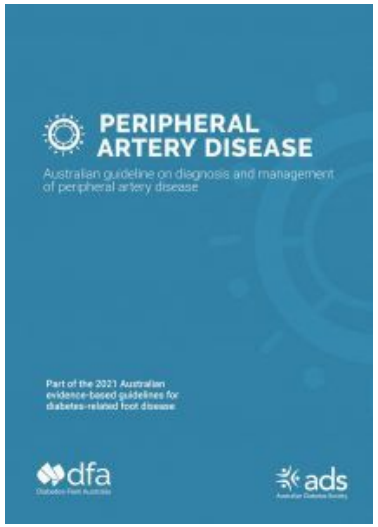
Foot wounds

Foot wounds in General Practice

- Most foot wounds require an antimicrobial, check sensation using a monofilament and check for PAD
- If the patient has diabetes the referral to a specific clinic managing foot wounds –such as www.iwgdf.com
- Also a pathway and access to other high risk foot services/advice is available at www.savefeetsavelives.com


IMPAIRED MMPs PRODUCTION
IMPAIRED CYTOKINE PRODUCTION
NEUROPATHY
IMPAIRED ANGIOGENESIS
NITROUS OXIDE BLOCKING
Diabetic wounds
IMPAIRED KERATINOCYTE PROLIFERATION AND MIGRATION
IMPAIRED FIBROBLAST PROLIFERATION AND MIGRATION
IMPAIRED GROWTH FACTOR PRODUCTION
IMPAIRED INFLAMMATORY CELL FUNCTION
DIABETES
GLYCATION OF HAEMOGLOBIN
HYPERGLYCAEMIA

Diabetes Feet Australia



Developed 6 new guidelines

- multidisciplinary best practice standards of care for the provision of DFD care within Australia.
- Each guideline is accompanied by a free webinar.
- Each guideline can be downloaded individually, or the full guideline is also available to download.

Cornerstones of Foot Ulcer Prevention

1. Identifying the at-risk foot
2. Regularly inspecting and examining the at-risk foot
3. Educating the patient, family and healthcare professionals
4. Ensuring routine wearing of appropriate footwear
5. Treating risk factors for foot ulceration

Skin cancers

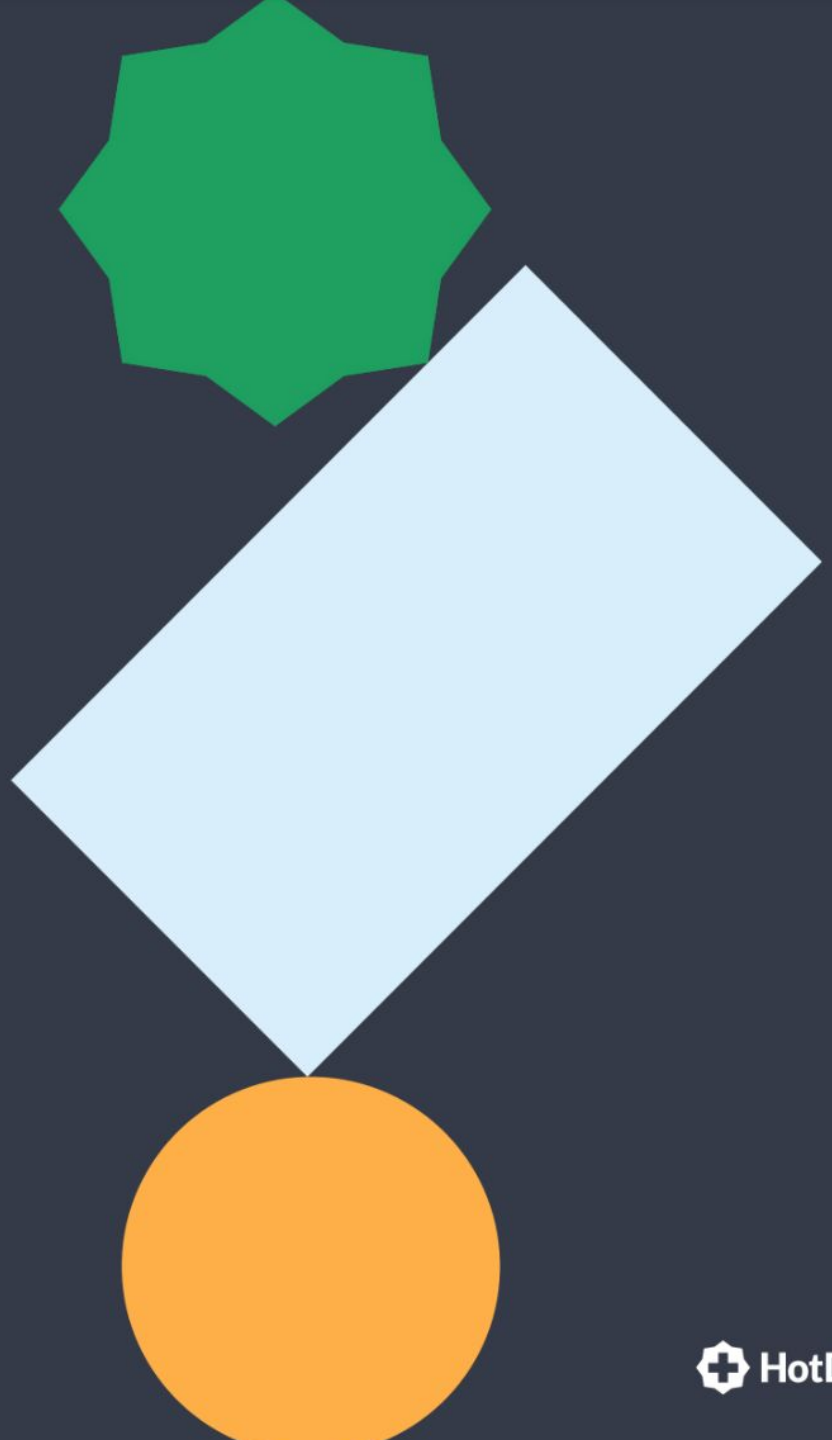
Managing skin lesions

- Ideally ensure correct diagnosis
- Ideally have removed and pathology report
- If surgery not an option, then antimicrobial and absorbent pad 2nd to 3rd daily

www.ewma.org
www.woundsinternational.com

New documents

Questions



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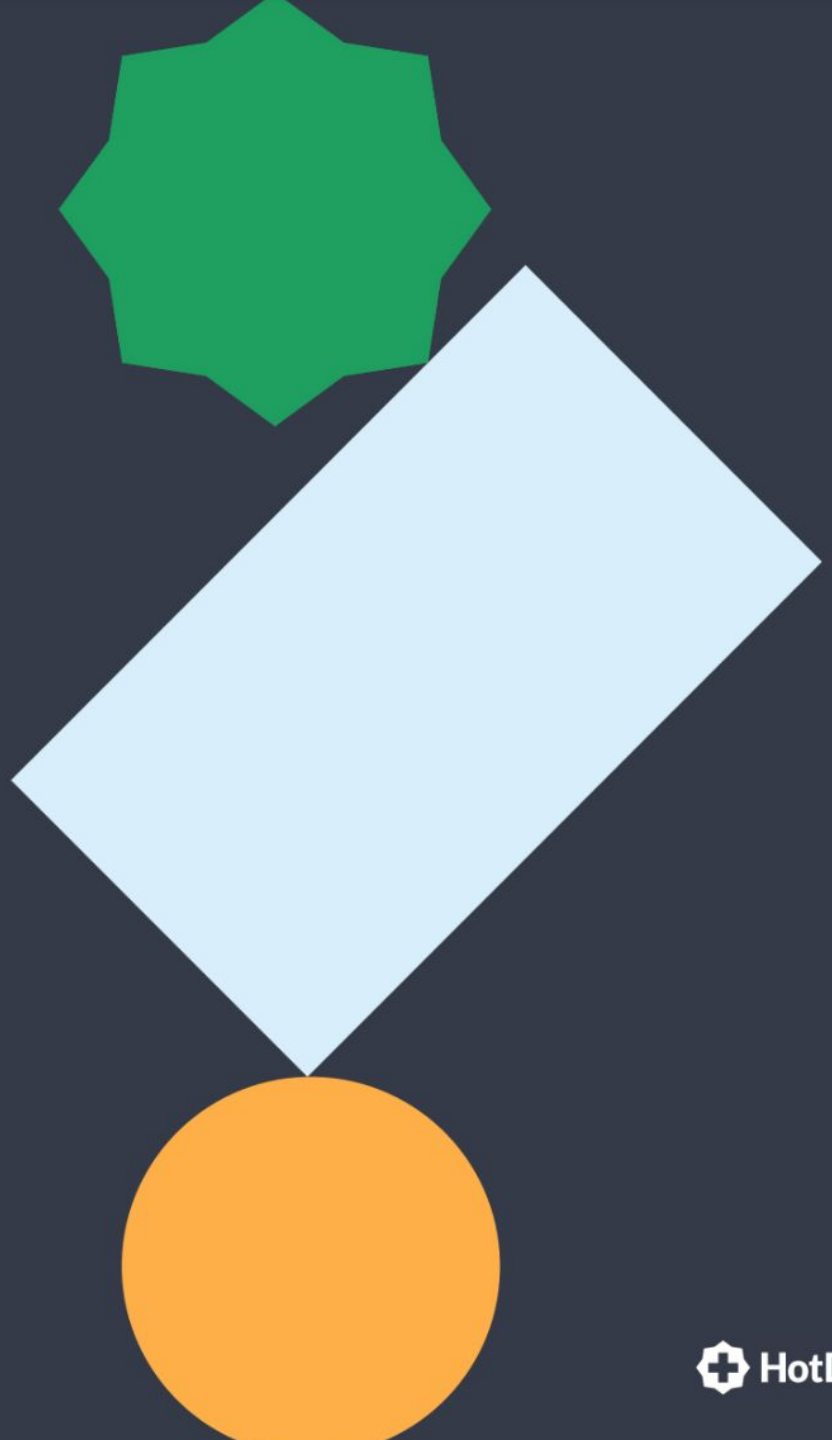

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