UrgoClean Ag UrgoStart plus

UrgoClean Ag and UrgoStart Plus in Real Life

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INTRODUCTION

The presence of wounds, more notably chronic wounds, represents a considerable burden in terms of economic cost to health and social care providers, and negatively impacts patient quality of life (Welsh, 2018).

The growth in the incidence and prevalence of chronic wounds has been referred to as the modern age silent epidemic (Järbrink et al, 2017), with the global burden estimated at 1.51 to 2.21 per 1000 people living with chronic wounds at any time (Zhu et al, 2022). Although statistics regarding the impact of chronic wounds may currently be lacking in the Middle East, most data published by international bodies, including the International Diabetes Federation (IDF, 2021), state that the Gulf countries are among the top countries globally in the prevalence of obesity and diabetes. These conditions can increase the risk of diabetic foot disease, venous ulcers and pressure injuries (Itani, 2015).

It has been suggested that, in the Arab world, the prevalence of diabetes has doubled in the last decade alone and, in some countries, has tripled. Some countries in the region are ranked as having the highest prevalence of diabetes worldwide, reaching to approximately 20% in certain populations (Al-Wahbi, 2006). According to the IDF, in the Middle East and North Africa, 73 million adults (20–79 years) are living with diabetes, the highest proportion of all IDF regions, with 27 million adults undiagnosed. Prevalence of diabetes in the Gulf countries is highest in Kuwait (25.5%), followed by Oman (11.8%), Qatar (16.4%), Saudi Arabia (17.7%), the UAE (12.3%) and Jordan (14.8%; IDF, 2021).

A wide range of wound care products and devices are available for managing complex wounds, providing practitioners with the means to heal these wounds and to deal with more challenging and difficult cases (World Union of Wound Healing Societies [WUWHS], 2020). However, it has been argued that there is a lack of robust evidence to guide practice and services, thus creating uncertainty for those who deliver and manage wound care (Gray et al, 2017).

Evidence-based practice (EBP) and decision-making is linked to improved quality of care, patient safety, and positive clinical outcomes (Connor et al, 2023). EBP is the recognised and required standard for healthcare providers, supported by international and professional healthcare organisations and regulatory agencies (Connor et al, 2023). The initiation and publication of evidence is the first step towards changing practice. Once generated, the next important step is knowledge transference and utilisation to translate study results into everyday clinical practice and health decision-making (WUWHS, 2020). EBP mandates that new information derived from high-level and robust evidence is consolidated into clinical practice guidelines to improve the quality of care that patients receive. When considering change in practice, clinicians must evaluate three important outcomes:

- The clinical efficacy of the product or device in wound management and healing outcomes
- How it will help in improving the patients' health related quality of life
- How will it impact health economics by lowering both direct and indirect costs (Apelqvist et al, 2013).

Finding dressings that provide the clinician with all the beneficial factors to target wound care challenges can be quite difficult. Traditional techniques, which experience suggests are likely to be helpful, may not provide the best option (Chapman, 2017). Evidence-based decisions matter and are able to guide health care decisions (i.e. what is most likely to be effective and which dressings to apply, including how and when to use them and for what wound type). Moreover, it is essential to understand the best available evidence regarding particular dressings to advocate for their use (Chapman, 2017). Some modern advanced dressings have been shown, through robust evidence, to be beneficial in the removal of necrotic tissue and fibrin, play a role in autolysis and debridement, and avoid re-injury of new granulation tissue and promote cell proliferation, differentiation and epithelial cell migration (Shi et al, 2020).

This document showcases real-world outcomes from cases across the Middle East, implementing the sequential continuum of care with UrgoClean Ag® and UrgoStart Plus® (Urgo Medical, Chenove, France) in practice. The cases complement the high level of evidence for these dressings, demonstrating improvements in healing rates, as well as enhanced patient quality of life and clinicians' satisfaction.

UrgoClean Ag is an advanced wound care dressing made of cohesive poly-absorbent fibres impregnated with a silver lipido-colloid matrix (Technology Lipido-Colloid-Ag healing matrix [TLCAg]). The different technologies included in this dressing have all been rigorously tested *in vitro* and *in vivo,* and in clinical evaluations to provide an evidence-based solution for wound care clinicians (Van Hieu et al, 2021). The poly-absorbent fibres are beneficial absorbing wound exudate and trapping sloughy residue (Meaume et al, 2012a; Sigal et al, 2019), helping to continuously clean the wound by their affinity for wound debris. The silver component provides the desired antimicrobial, while also being an effective antibiofilm solution (Percival, 2020).

INTRODUCTION (CONTINUED)

The UrgoStart® Treatment Range has been shown to effectively reduce matrix metalloproteinases (MMPs; Nair et al, 2021) and is supported by extensive clinical trials and studies, including two double-blind studies (Edmonds et al, 2018; Meaume et al, 2012b), data analyses (Münter et al, 2017), comparative studies (Schmutz et al, 2008) and real-life studies (Augustin et al, 2021), and in various publications that include over 12,000 patients. This robust evidence has proven that the UrgoStart Treatment Range provides clinicians with an evidence-based option and is beneficial in promoting the healing process, reducing healing times, enhancing patients' health related quality of life, and in allowing a more cost-effective procedure (Nair et al, 2021).

Due to this high level evidence, the UrgoStart Treatment Range is recommended by international bodies such as The International Working Group on the Diabetic Foot (Schaper et al, 2023), The National Institute for Health and Care Excellence (NICE, 2023), Diabetes Feet Australia (Kaminski et al, 2022), and the Ministry of Health (Ministry of Health Medical Examination and Treatment Administration, 2023), amongst others.

The clinicians involved in the cases presented in this document used the protocol for wound prevention and management of the diabetic foot as shown on page 5. One to one interviews were conducted with each of the clinicians to capture their real life experiences and thoughts about using the protocol and UrgoStart Treament Range. Although these cases represent a small cohort, the results and clinician feedback provide clinicians in the Middle East with confidence that these dressings can be implemented as part of an evidence-based standard of care in the region.

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Wound Protocol

Prevention and management of Diabetic Foot Ulcer

1 **Make holistic assessment**
Full wound and patient assessment, identify the risks

2 **Treat underlying aetiology**
Address underlying factors impeding healing (vascular supply, metabolic control,...)

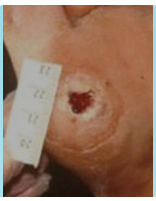
3 **Implement evidence-based standard of care**
Off-loading, Ischemia control, Infection control, Debridement, local treatment

Local treatment

Non infected DFU

UrgoStart plus

From Day 1 to complete healing



1. Clean and prepare wound as per local protocol
2. Apply **UrgoStart Plus** from first visit to wound closure
3. Dressing is replaced according to exudate levels but can be kept up to 7 days

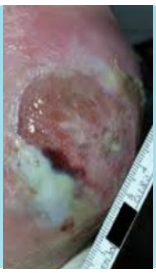
Infected DFU

UrgoClean Ag

Manage wound infection and biofilm
Recommended dressing change every 1 to 2 days

UrgoStart plus

Once infection is resolved until complete healing



1. Start antibiotics as per local protocol if suggested
2. Clean and prepare wound as per local protocol
3. Apply **UrgoClean Ag** and continue until signs and symptoms of infection subside, then continue with **UrgoStart Plus** until wound healing
4. Dressing is replaced according to infection and exudate levels but can be kept up to 7 days

URGO MEDICAL
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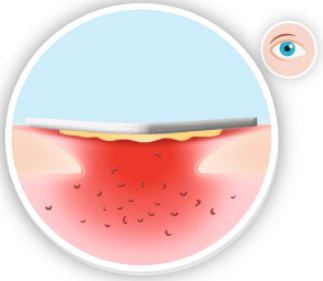
UrgoStart Plus treatment range closes wounds sooner

1 ▶▶▶▶▶▶▶▶▶▶▶ 2 ▶▶▶▶▶▶▶▶▶▶▶ 3

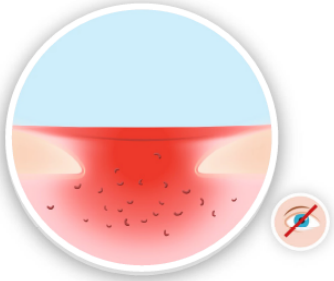
Continuously **CLEANS**[1,2]



Polyabsorbent fibres trap slough and keep the wound clean

You can use 1 simple treatment on all tissue types: sloughy, granulating and epithelizing wounds

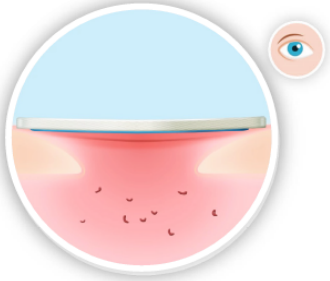
effectively **HEALS**[2,3,4]



Healing matrix reduces MMP levels and restores balance

Restoring balance to the patient's healing trajectory

CLOSES Sooner[4,5]



Closes wounds sooner than other dressings

The sooner you implement it, the better the outcomes[5,6,7]

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Dr. Nasser Al Humaidi

Consultant in General Surgery, Head of Diabetic Foot Unit, Farwaniya Hospital, Kuwait

> Urgo dressings work from the get go. You notice there is healthy tissue formation. I sleep better knowing I've done something good!

I use UrgoClean Ag and UrgoStart Plus on chronic wounds that are non-healing and mostly exudating, as well as wounds with lots of slough or necrotic tissue that we are unable to debride properly. I always start with UrgoClean Ag to treat signs of infection, then move on to UrgoStart Plus until complete healing. It's not about the wound site, it's about the wound type. I use a mixture of sizes, from minimal dressings to those that cover the whole leg or abdomen.

I started using Urgo products in 2019, after the International Working Group on the Diabetic Foot Guidelines recommendations, and since then I have seen how these dressing do what they claim to do. Wounds heal faster than the norm and my patients are very compliant with the treatment process. These characteristics really add to the value of Urgo products.

Dr Nasser Al Humaidi's top tips:

- Follow the protocol guidelines. It's a simple type of procedure, there are no major contraindications – if the wound shows infection, slough tissue or biofilm and exudate – apply UrgoClean Ag
- It's an easy process. When you see there is a gradual change, for example, a reduction in sloughy tissue, biofilm or exudate – start applying UrgoStart Plus
- When I use UrgoClean Ag and UrgoStart Plus, I know there is no need to worry.

Other dressings are more expensive and cause more problems. The UrgoStart Treatment Range is cost-effective and the price range is excellent.

When patients come to our clinic for a second opinion, I always shift them to Urgo products. They come with gauze dressing impregnated with povidone-iodine or medical honey dressings and the first thing I see is that the dressing is soaked with greenish discharge or exudate, and the skin has become significantly macerated, thus they are prone to developing a *pseudomonas* infection. Urgo dressings work from the get go. When you follow-up with the patient, you will notice there is healthy tissue formation. You never forget it, this is all down to shifting to UrgoStart Plus.

My patients realise that with UrgoClean Ag there is no pain associated with dressing removal. They see their wounds and ulcers healing better and they feel this is the right path and because they are confident, they are more compliant; they listen to advice and continue with medication. With other dressings, patients complain of the smell after a day or two, but with this type of dressing the patient is able to go out without worrying their dressing is causing a foul smell. Other dressings like gauze or padding need to be changed daily as they smell.

The dressing is easy to apply and remove, and it promotes debridement and the removal of slough tissue and biofilm. The amount of exudate is reduced, and UrgoStart Plus really does promote the formation of granulation tissue and reduces the amount of time that the wound takes to heal.

UrgoClean Ag is part of my protocol. I think it's essential we start with UrgoClean Ag. I know I am applying a safe dressing to a patient. It helps clean soft tissue, biofilm, and debris and reduces exudate by reducing infection. I sleep better knowing I've done something good!

Case study 1

Male patient, diabetic, presented with right hallux infection. No vascular issues. The patient was suffering with sepsis with infective gangrene on the medial aspect of the foot **[Figure 1]**. Surgical debridement and hallux amputation was performed. Treatment commenced with UrgoClean Ag. After 2 days of treatment, wound colouration improved and exudate decreased **[Figure 2]**. After 11 days, infection was under control and improved granulation tissue and good blood supply to the wound was noted **[Figure 3]**. Treatment then switched to UrgoStart Plus, with dressings initially changed every three days. After 119 days, full wound closure was achieved **[Figure 4]**.

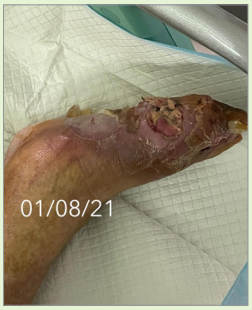

Figure 1: Initial presentation

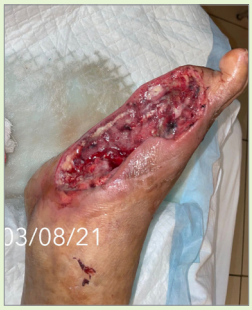

Figure 2: 2 days of treatment

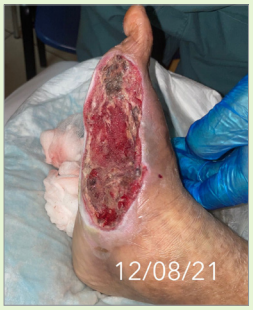

Figure 3: 11 days of treatment

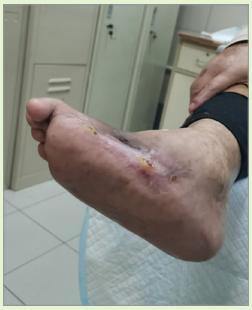

Figure 4: Final review (119 days of treatment)

Case study 2

Male patient, diabetic, presented with chronic, extensive lateral wound to the left leg and dorsum of the foot (51cm [length] x 12cm [width] x 4cm [depth; at deepest point]). Hallux amputation was performed prior to presentation. Metatarsal, fibular bone and peroneal tendons were visible; necrotic tissue and infection was present. There was pronounced exudate and sloughy tissue and biofilm was suspected, particularly on the dorsal aspect of the foot **[Figure 1a and 1b]**. UrgoClean Ag was applied for 10 days, with dressing changes every 48 hours to prepare the wound for surgery. Healthy granulation tissue was observed and infection was under control. Following surgery and extensive debridement, negative pressure wound therapy (NPWT) was applied in conjunction with UrgoStart Plus. **Figure 2a and 2b** shows the wound after the third session of surgical debridement and excision of part of the 1st metatarsal bone. After surgery and continued treatment with UrgoStart Plus (54 days), the wound had reduced in size significantly and was progressing towards healing **[Figure 3a and 3b]**.

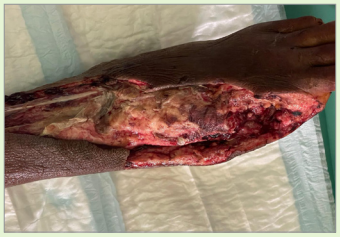

Figure 1a: Initial presentation

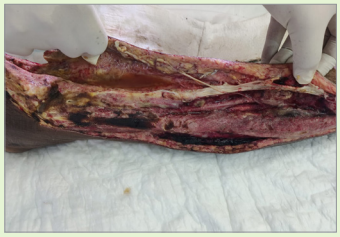

Figure 1b: Initial presentation

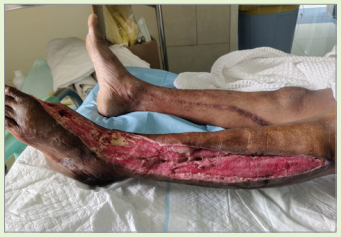

Figure 2a: Post-debridement and part excision (1st metatarsal bone)

Figure 2b: Post-debridement and part excision (1st metatarsal bone)

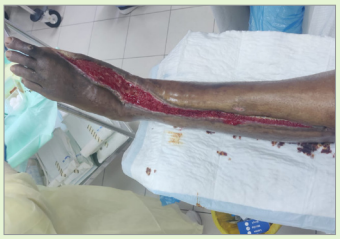

Figure 3a: 54 days of treatment

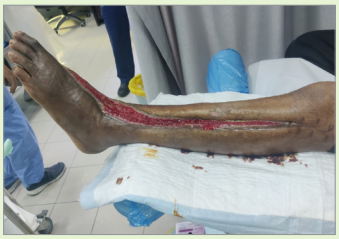

Figure 3b: 54 days of treatment

Dr. Hani Badahdah

Consultant Foot and Ankle Surgeon, Diabetic Foot Center, Qassim, Saudi Arabia

> “Infection was managed well by the cleansing action of the dressing fibres and there were reductions in necrotic tissue, slough and smell.

UrgoClean Ag and UrgoStart Plus have been used predominantly on diabetic foot ulcers (DFUs), including hallux ulceration. These wounds presented with several signs of infection, including slough, swelling and erythema to the surrounding skin.

The UrgoClean Ag and UrgoStart Plus protocol pathway was initiated as a measure to avoid amputation and limb loss, and to address factors that were causing delayed healing such as slough, biofilm and high protease levels. Alternative products that are widely used on our patients include foams, hydrogels and collagen dressings.

UrgoClean Ag was easy to apply and remove, and dressing changes were pain-free for patients. Infection was managed well by the cleansing action of the dressing and there were reductions in necrotic tissue, slough and smell. Dressing changes were more frequent at the beginning of treatment due to heavy exudate and discharge levels; however, dressing changes eventually reduced.

Dr Hani Badahdah's top tips:

- I have seen good results with the UrgoClean Ag and UrgoStart Plus protocol pathway – it might be helpful to introduce this into practice to reduce the risk of amputation
- Diagnose and manage infection, and look for factors delaying wound healing. The earlier you implement the protocol, the better results you will get.

Following antimicrobial therapy, consisting of anti-biofilm action and de-sloughing, UrgoStart Plus was used to promote and accelerate wound closure.

Good improvements were seen with UrgoStart Plus, which was used in patients that were initially advised to undergo an amputation because of insufficient pulses (non-palpable) and the presence of factors that indicate delayed healing, including comorbidities.

Our patients were satisfied and happy with their results.

I would recommend UrgoClean Ag and UrgoStart Plus for patients with DFUs. It is especially important to change treatment from UrgoClean Ag to UrgoStart Plus once infection is treated, as silver dressings are no longer needed. In my opinion, challenging ulcers with vascularity problems require evidence-based practice, such as the winning UrgoClean Ag and UrgoStart Plus protocol pathway. Since the UrgoStart treatment range is so big, we must focus on educating our team to support them in choosing the best product and avoiding problems with dressing application.

Case study 1

Male patient, 55, with a history of diabetes mellitus, obesity and other comorbidities. Presented with a right hallux wound with necrotic tissue, slough and swelling, as well as non-palpable pedal pulses on the right foot [Figure 1a and 1b]. A wound swab was taken, and intravenous antibiotics were given according to the culture result. Following debridement and initiation of standard wound care, the patient was treated with collagenase and UrgoClean Ag for 5 weeks. Treatment switched to UrgoStart Plus once the wound showed signs of healthy granulation tissue. Dressing changes were frequent (2-3 times a week) until complete wound closure was achieved after 16 weeks of treatment [Figure 2a and 2b]. As a result of the UrgoClean Ag and UrgoStart Plus protocol pathway, the patient's right hallux was saved from amputation.

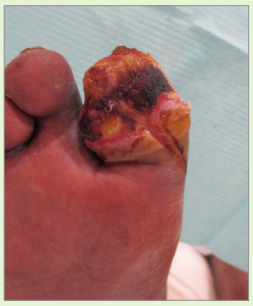

Figure 1a: Initial presentation

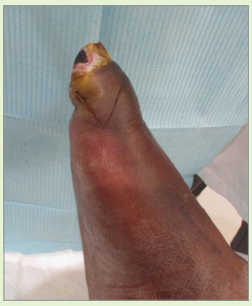

Figure 1b: Initial presentation

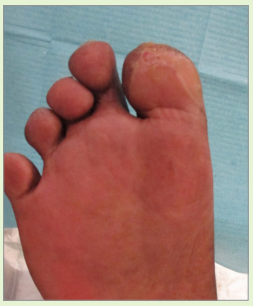

Figure 2a: Final review (16 weeks of treatment)

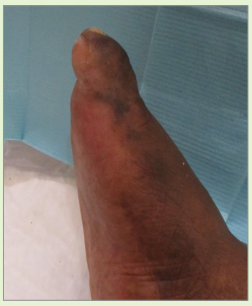

Figure 2b: Final review (16 weeks of treatment)

Case study 2

Male patient, 65, with a history of diabetes mellitus and obesity. Presented with bluish discolouration (cyanosis) of the left 5th digit and with an open wound on the lateral aspect of the left foot [Figure 1a and 1b]. Left 5th toe amputation was recommended and treatment for the open wound using the Urgo pathway was discussed. The left foot wound was noted to have periwound erythema and sloughy tissue, and the bone was visible. The left dorsalis pedis artery (DP) pulses were palpable; posterior tibial artery (PT) was non-palpable. The wound was infected and intravenous antibiotics were started based on the culture result. Bedside wound debridement was carried out and UrgoClean Ag applied. Initially, the dressing was changed 3 times a week until the wound improved and the tissues started to granulate. After 6 weeks, once the infection was resolved and as per the protocol pathway, treatment changed to UrgoStart Plus until complete wound closure. Complete wound closure was achieved after 10 weeks [Figure 2].

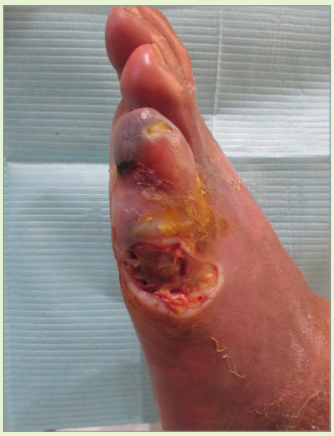

Figure 1a: Initial presentation

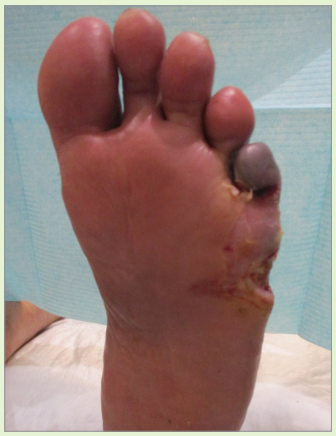

Figure 1b: Initial presentation

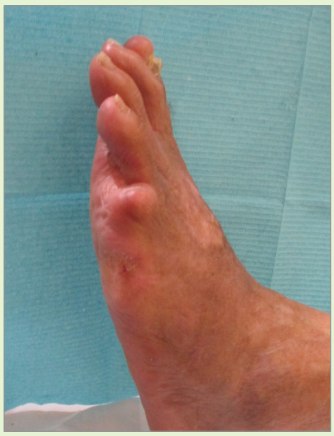

Figure 2: Final review (10 weeks of treatment)

Dr. Kim Sarmiento

General Practitioner, Head of Department, Wound Care and Long-Term Care and Rehabilitation, Burjeel Darak, Abu Dhabi, United Arab Emirates

I use UrgoClean Ag and UrgoStart Plus on long-term pressure injuries and on elderly patients with necrotic wounds located on the dorsum of the foot. I have used Urgo products as a continuum of care instead of alternative treatment options, including vacuum-assisted closure, NPWT, calcium alginates and silver dressings. I have seen UrgoClean Ag and UrgoStart Plus help heal my patients' long-term wounds within a few weeks.

UrgoClean Ag possesses strong absorption and gelling properties, allowing it to lock in moisture and transfer exudate efficiently from the wound bed to the secondary dressing. My patients say that UrgoClean Ag is very easy for them to change themselves, and they have reported less pain while using UrgoClean Ag than other dressings. My team and I train our patients on how to manage their wounds independently, and we make sure that they are aware of who to contact if they have a question or encounter a problem.

> "For scar reduction and faster wound healing, I use UrgoStart Plus.

Dr Kim Sarmiento's top tips:

- Listen to the patient, ask them what their needs are and explain to them why they have a wound, the need for compression and the importance of offloading
- Give patients options regarding their treatment, especially if they are self-funding
- No single technique or product is suitable for all patients and their wounds, so wound care must always be individualised to the patient.

In terms of slough and biofilm management, I would recommend UrgoClean Ag over UrgoStart Plus; however, for scar reduction and for faster wound healing by secondary intention, I would suggest using UrgoStart Plus. Treatment is switched to UrgoStart Plus when the wound bed shows a reduction in slough and necrotic tissue, as UrgoStart Plus has strong absorptive properties and stimulates granulation tissue growth.

My patients say that UrgoStart Plus is a comfortable and pain-free dressing.

The continuum of care of UrgoClean Ag and UrgoStart Plus may be a good protocol to implement in healthcare organisations that do not have the tools or resources to facilitate home care. We are noticing that our elderly patients are reluctant to come into hospital, and a protocol like this facilitates and improves home-based wound care.

I would recommend using UrgoStart Plus on superficial wounds instead of cavity wounds. UrgoStart Plus is also helpful in treating DFUs. I prefer to use UrgoStart Plus on the lower extremities (e.g. the heel) as it sticks for longer. I recommend using UrgoClean Ag following, or in place of, surgical debridement and for patients that are candidates for sedation, topical anaesthetics, or treatment of a sensitive area that may elicit more pain.

Case study 1

Female patient, 92, with a Stage 4 medical device-related pressure injury from a bilevel positive airway pressure mask [Figure 1]. UrgoClean Ag was applied under the foam dressing used during bilevel positive airway pressure application for 3 weeks until the patient was eventually tracheostomised secondary to respiratory failure [Figure 2]. The dressings were changed every 2-3 days. Serial conservative sharp wound debridement was conducted in between dressing changes. After 3 weeks, dressings were changed every 3-4 days and a secondary hydrocolloid dressing introduced [Figure 3]. With the wound visibly healing, the protocol pathway was followed and the dressing changed to UrgoStart Plus. As treatment continued, the wound reduced in size [Figure 4, 5 and 6]; healing was rapid with total wound closure achieved after 11 weeks [Figure 7].

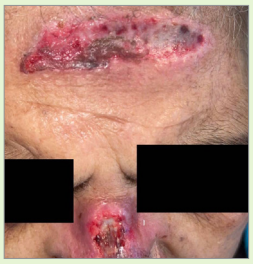

Figure 1: Initial presentation

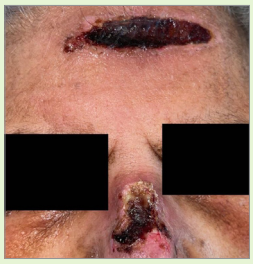

Figure 2: 3 weeks of treatment

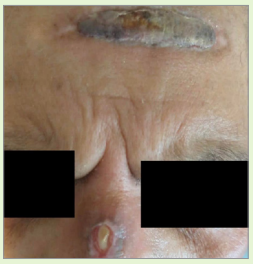

Figure 3: Hydrocolloid dressing introduced

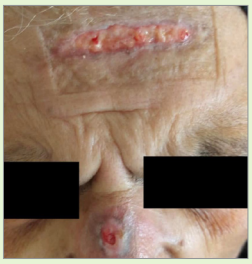

Figure 4: 4 weeks of treatment

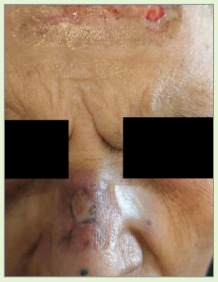

Figure 5: 6 weeks of treatment

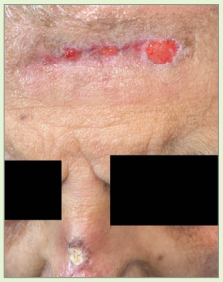

Figure 6: 9 weeks of treatment

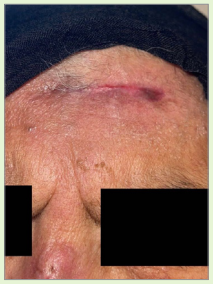

Figure 7: Final review (11 weeks of treatment)

Case study 2

Female patient, 90, with a history of end-stage renal disease on regular hemodialysis, chronic respiratory failure, ventilator dependent via tracheostomy, diabetic and hypertensive. Presented with tissue necrosis secondary to intravenous extravasation with a soft tissue abscess [Figure 1]. Debridement was undertaken to remove necrotic tissue and the abscess was drained. UrgoClean Ag protocol was followed and a secondary dressing also used. The dressing was changed every 2-3 days. After 15 days, dressing changes reduced to every 3-4 days [Figure 2]. Wound size and exudate levels reduced, infection was controlled, and the wound bed was red and healthy looking. As per the Urgo protocol pathway, UrgoStart Plus was selected for use. The dressing was changed every 4-5 days for 14 days [Figure 3], then every 5-7 days for 14 days [Figure 4] until the wound was fully healed [Figure 5].

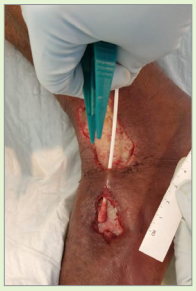

Figure 1: Initial presentation

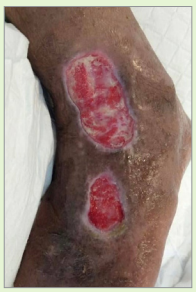

Figure 2: 15 days of treatment

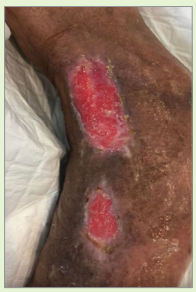

Figure 3: 37 days of treatment

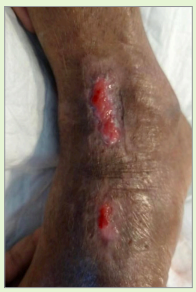

Figure 4: 50 days of treatment

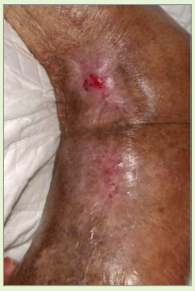

Figure 5: Final review (75 days of treatment)

Dr. Kristi Janho

Senior Vascular and Endovascular Surgeon, Private practice, Jordan

In my practice as a vascular surgeon I work on different types of wounds but deal mostly with vascular and diabetic patients with venous ulcers and DFUs. Historically, I've used a variety of dressing such as hydrofiber dressings, silver dressings and honey dressings. Dressing choice is determined by wound type.

I was keen to begin using Urgo products after I read the case studies (Wounds UK, 2020; Wounds Asia, 2021), particularly UrgoClean Ag, as it reduces biofilm, removes slough, decreases pain and exudate, and creates a clean base for wound healing.

I have seen good results with UrgoClean Ag and UrgoStart Plus. I like how it fights microorganisms and the two product pathway. Based on my experience with Urgo, I would recommend using these dressings.

> "The patient avoided amputation, is moving around on his walker and has no dressings at all. To see that happen within 48 days was magic!

Dr. Kristi Janho's top tips:

- Make sure you choose the best dressing for the best patient
- UrgoClean Ag will shift stubborn microorganisms that topical or systemic antibiotics are not treating. Try it and use UrgoClean Ag to reduce biofilm
- Using Urgo products will save money and time because infections are reduced and healing time is quicker.

As part of my practice, I have used a combination of UrgoClean Ag and UrgoStart Plus on patients with severe wounds and who were a high risk for surgical procedure under anaesthesia (even for surgical debridement). I also use the protocol for patients who are suffering with a lot of pain from their ulcers and needing regular dressing changes.

Amputation is often the easiest way to deal with bad ulcers that are chronic, smelly and severely exudating. I want to avoid amputations, if I can, to help patients remain on their feet and promote independence. The Urgo products have helped me do this. They have also helped my patients save money by avoiding surgery. I generally apply UrgoClean Ag to remove sloughy tissue, encourage granulation and control infection. As soon as I see a healthy red colour visible underneath, I then switch to UrgoStart Plus. I had a patient who was recommended for a full foot amputation but after using Urgo dressings, he is now completely healed and moving around on his walker with no dressings at all. To see that happen within 48 days was magic!

In my experience, UrgoClean Ag is also more effective on methicillin-resistant *Staphylococcus aureus* (MRSA) and biofilm than other dressings and I have seen it successfully heal a patient with severe gangrene. Following the care pathway, the wound was soon bright red and healthy and the culture result showed MRSA was no longer present. I'm really glad I tried it!

My patient is now walking, functioning independently and has returned to work.

References

Wounds UK (2020) UrgoStart Plus in Real Life. Available at: https://wounds-uk.com/wp-content/uploads/sites/2/2023/02/e06dd035f517d3c2d5477c0235023178.pdf.

Wounds Asia (2021) UrgoClean Ag in Real Life. Available at: https://woundsinternational.com/wp-content/uploads/sites/8/2023/02/5620be66a2b4e14b740943c6ea048b31.pdf

Case study 1

Male patient, 72, diabetic, obese and heavy smoker. All five toes had developed gangrene, the dorsum of the foot was exposed and tendons visible with no signs of healing [Figure 1]. Both MRSA and *pseudomonas* were detected. UrgoClean Ag was used for the first 14 days to prepare for surgery and infection resolved [Figure 2]. Post-surgery, UrgoClean Ag was used for a further 18 days [Figure 3]. Following the UrgoClean Ag and UrgoStart Plus protocol pathway, treatment switched to UrgoStart Plus [Figure 4]. The wound fully healed 78 days after starting treatment [Figure 5].

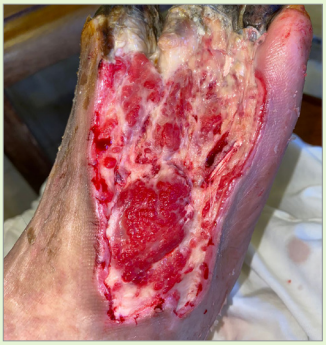

Figure 1: Initial presentation

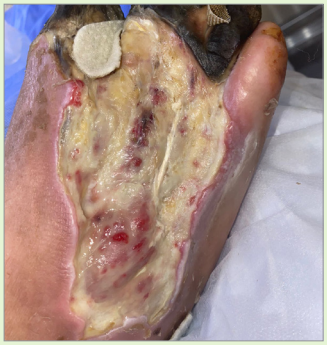

Figure 2: Infection resolved

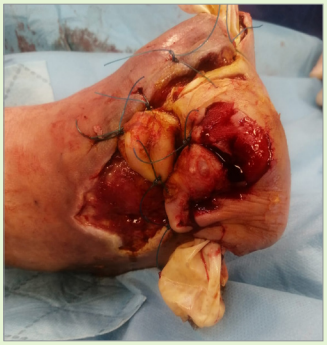

Figure 3: 18 days of treatment

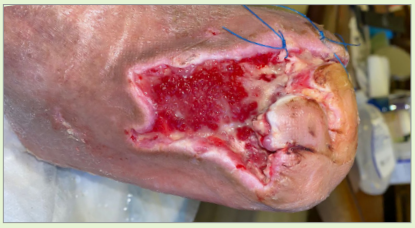

Figure 4: Treatment changed to UrgoStart Plus

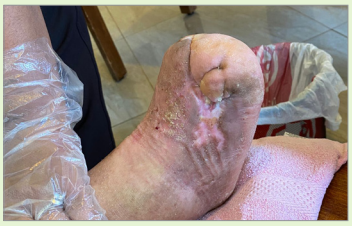

Figure 5: Final review (78 days of treatment)

Case study 2

Male patient, 82, smoker, obese with diabetes mellitus, congestive heart failure and hypertension. Presented with severe venous ulcers (10cm [length] x 8cm [width]) on each leg [Figure 1]. The patient was in pain and also had severe lower limb oedema due to heart failure. The wounds were exudating and there was severe discolouration of the skin [Figure 2] and a foul smell with no signs of granulation. UrgoClean Ag was applied for 18 days. Sloughy tissue was removed. There were signs of granulation and the infection was under control. The surface colour of the encrusted yellow ulcers started to improve and there was a healthy red granulation tissue visible underneath [Figure 3]. Using the UrgoClean Ag and UrgoStart Plus protocol pathway, treatment switched to UrgoStart Plus for 30 days. Dressings were changed every 48 hours and every three days over the weekend. The wound completely healed 48 days after starting the Urgo protocol [Figure 4].

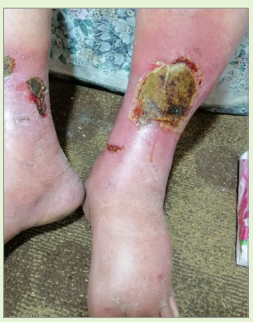

Figure 1: Initial presentation

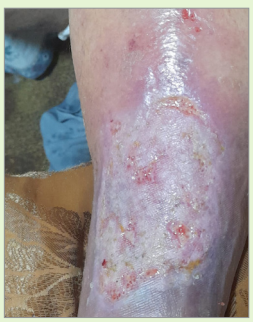

Figure 2: Severe skin discolouration

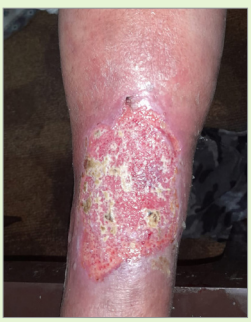

Figure 3: Healthy red granulation tissue

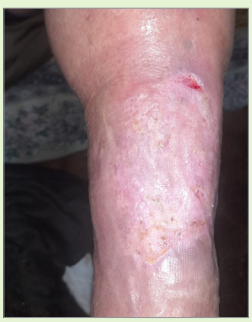

Figure 4: Final review (48 days of treatment)

Mr. Sulaiman Saif Said Al Riyami

Senior Wound Nurse, National Diabetes and Endocrine Centre at the Royal Hospital (MOH), Muscat, Oman

In my clinic, UrgoClean Ag and UrgoStart Plus have been used predominantly on DFUs and neuropathic ulcers located in areas such as the plantar aspect, heel, dorsal aspect, and around the malleolus. My patients all have a history of long-term type 2 diabetes and non-healing chronic wounds – I have patients with longstanding wounds, several over 20 months in duration. I chose to use Urgo products as previous dressings such a silver products and honey dressings had been ineffective. The Urgo pathway definitely improved the quality of life for my patients. Within 12 weeks of starting treatment all of the wounds were improving, which was satisfying for me as a nurse and my patients were very happy to see such quick results after enduring the wounds for so long.

In our practice, UrgoClean Ag and UrgoStart Plus helped to increase granulation tissue by keeping the wound clean from slough, bacterial residues and biofilm, and led to improved healing rates.

> “Patients found the dressings comfortable to wear and pain-free at removal. Their quality of life was definitely improved.

Mr. Sulaiman Al Riyami's top tips:

- UrgoClean Ag and UrgoStart Plus are ideal dressing options to accelerate wound healing in chronic wounds
- Depending on exudate levels, the dressings may need to be changed more frequently
- Patients can be stepped down from UrgoClean Ag to UrgoStart Plus once infection has cleared and wound healing has progressed.

The wounds also reduced in size over the treatment period. The dressings were easy to apply; patients found the dressings comfortable during wear time and atraumatic and pain-free at removal.

UrgoClean Ag and UrgoStart Plus may be particularly beneficial in cases of hard-to-heal and static wounds.

Once infection has cleared and the wound shows signs of healing, treatment can be stepped down from UrgoClean Ag to UrgoStart Plus. I would recommend UrgoClean Ag and UrgoStart Plus to other clinicians due to their clinical results, ease of application and patient satisfaction.

Case study 1

Female patient, 78, type 2 diabetic (15 years) with a HB1C of 7. She was on oral antihyperglycemic medications, as well as medication for hypertension. The patient presented with an open wound in the dorsum aspect of the right foot, post-debridement. The wound measured 11cm (length) x 7cm (width) x 8mm (depth). The wound bed consisted of 25% slough, 50% granulation tissue and 25% epithelialisation tissue. Mild serosanguinous discharge was noted **[Figure 1]**. Treatment commenced with UrgoClean Ag **[Figure 2]**. Infection was controlled, slough reduced and healthy granulation tissue was observed **[Figures 3 and 4]**. The dressing was changed to UrgoStart Plus **[Figure 5]**. The wound completely healed 8 weeks after initial presentation **[Figure 6]**.

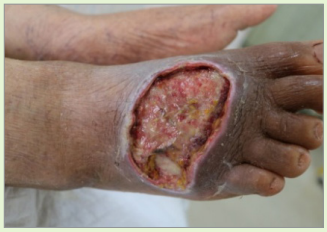

Figure 1: Mild serosanguinous discharge noted

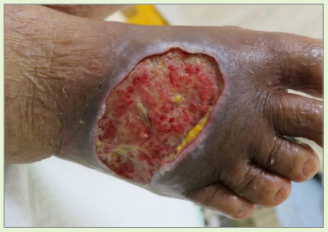

Figure 2: Treatment commenced with UrgoClean Ag

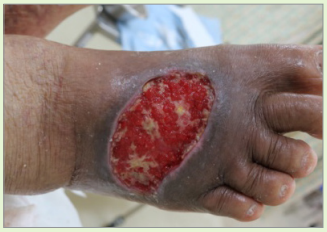

Figure 3: Reduced slough and increased healthy granulation tissue

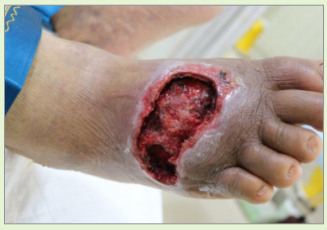

Figure 4: Reduced slough and increased healthy granulation tissue

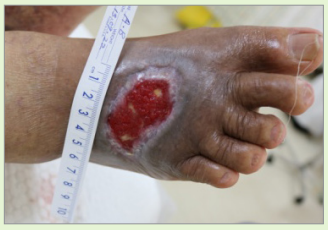

Figure 5: Treatment commenced with UrgoStart Plus

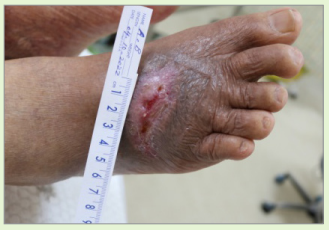

Figure 6: Final review (8 weeks of treatment)

Case study 2

Female patient, 56, with hypertension and type 2 diabetes (20 years duration) suffering from recurrent DFUs. The patient had suffered a stroke and presented with general weakness and difficulty speaking. She had an ulcer in the planter aspect of 4th metatarsophalangeal joint (MTPJ), measuring 2.5cm (length) x 2.1cm (width) **[Figure 1]**. The wound was clear and no infection/biofilm was suspected. Treatment began with UrgoStart Plus. **Figure 2** shows wound progress after 4 weeks. The wound healed 10 weeks after starting treatment **[Figure 3]**; however, a new ulcer had developed in the planter aspect of the left midfoot that required further management.

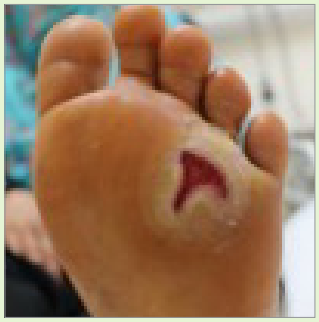

Figure 1: Initial presentation

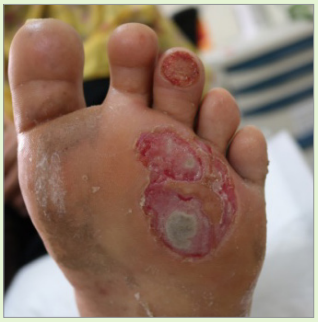

Figure 2: 4 weeks of treatment

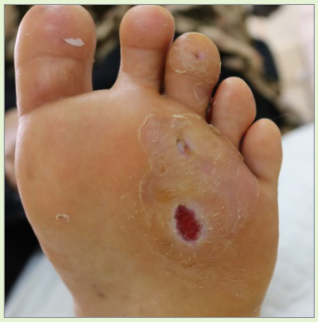

Figure 3: Final review (10 weeks of treatment)

Dr. Fadi Abu Najem

Surgeon, Department of General Surgery, Adan Hospital, Kuwait

> UrgoClean Ag worked like magic to cleanse the wound of exudate and slough, provide antibacterial action, and reduce signs of inflammation.

In our practice, UrgoClean Ag and UrgoStart Plus are used for several types of wounds, including sloughy wounds, to encourage epithelialisation and granulation tissue growth. UrgoClean Ag and UrgoStart Plus have also been used in our hospital on an abscess located on the sole of the foot and a chronic heel ulcer.

Previously, patients were treated using alternative techniques including antiseptics, iodine-containing surgical dressings and silver dressings. UrgoClean Ag and UrgoStart Plus were used where no other products had shown improvements to the wound.

UrgoClean Ag worked like magic to cleanse the wound of exudate and slough, provide antibacterial action, and reduce signs of inflammation. Using UrgoClean Ag reduced dressing change frequency from almost every day to 2–3 times a week.

Dr Fadi Abu Najem's top tips:

- UrgoClean Ag is ideal for patients with renal failure, where the dressing's antimicrobial properties can successfully replace the toxicity of systemic antibiotics, as well as their side effects which may have a negative impact on renal function
- Switching from UrgoClean Ag to UrgoStart Plus is essential to accelerate the healing process and prevent chronicity.

In comparison to other dressings that have required forceps to remove, UrgoClean Ag was easy to apply and remove by hand, and was comfortable and pain-free for patients at each dressing change.

We switch treatment from UrgoClean Ag to UrgoStart Plus when visible reductions in slough and improvements in epithelialisation are seen. UrgoStart Plus helps to decrease metalloprotease levels and encourage healing, which improves patients' quality of life and enables their return to work.

Unlike other products, UrgoClean Ag and UrgoStart Plus do not stick to wounds and have strong safety profiles, which has benefits for clinicians, patients and hospitals.

Case study 1

Male patient, 70, smoker with type 2 diabetes. Patient presented with a chronic DFU (classification Wagner Grade 1). The ulcer developed on the right foot following toe amputation three months prior. Neuropathy was identified and ischemia was diagnosed at the region of the wound. Previous treatment included povidone-iodine, sharp debridement, irrigation and an antimicrobial dressing. The wound was worsening before the Urgo protocol was implemented **[Figure 1]**. The wound measured 4cm (length) x 4cm (width) with poor vascularisation and was pale in appearance. As per the Urgo protocol pathway, as soon as infection resolved **[Figure 2]**, UrgoStart Plus was applied. Dressing changes were carried out twice a week. After 4 weeks, a significant improvement in wound progress was noted. The wound had reduced in size and looked healthier and more superficial **[Figure 3]**. Full closure was achieved in 21 weeks **[Figure 4]**.

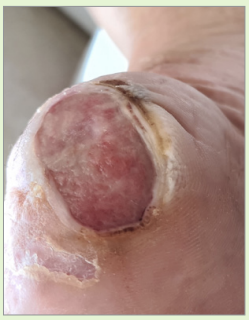

Figure 1: Treatment commenced

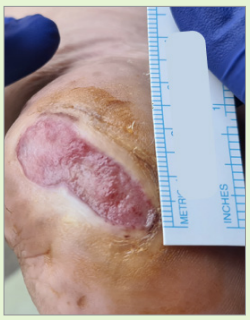

Figure 2: Infection resolved

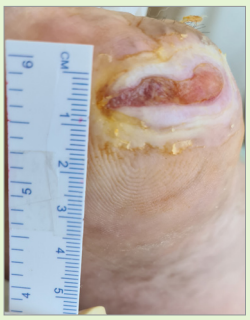

Figure 3: 4 weeks of treatment

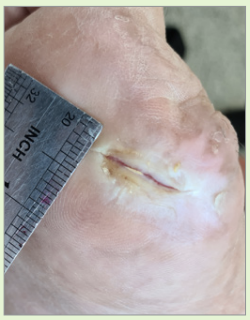

Figure 4: Final review (21 weeks of treatment)

Case study 2

Male patient, 50, with a history of type 2 diabetes. Patient presented with right plantar chronic DFU (Wagner Grade 1). Multiple ulcers were present and the wound had stagnated for 2 months. Neuropathy and ischemia at the wound region was diagnosed. Prior to the Urgo protocol, povidone-iodine, sharp debridement and an antimicrobial hydrofiber dressing was used, as well as topical creams, but the wound did not improve **[Figure 1]**. The wound measured 2.5cm (length) x 1.5cm (width), was poorly vascularised and pale in appearance. Urgostart Plus protocol was implemented. At commencement of treatment, the wound consisted of 20% slough with moderate exudate and granulation tissue. Dressings were changed twice a week. After 4 weeks of using UrgoStart Plus, a significant improvement in wound progress was noted **[Figure 2]**. The wound reduced in size to 1.5cm (length) x 1cm (width), looked healthier and more superficial and now consisted of 100% granulation tissue. After 12 weeks of treatment with UrgoStart Plus, full wound closure was achieved **[Figure 3]**. The patient was satisfied with the dressing experience (atraumatic and pain-free application).

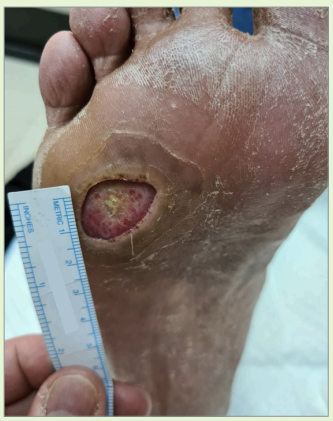

Figure 1: Stalled wound healing

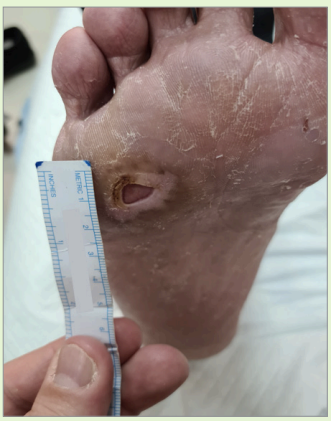

Figure 2: 4 weeks of treatment

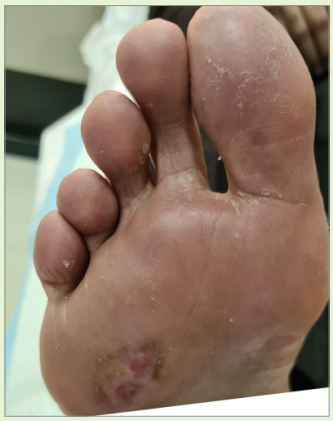

Figure 3: Final review (12 weeks of treatment)

Ms. Iman Al Lawati

Senior Podiatrist, Khoula Hospital, Oman

I work in a Ministry of Health Hospital as a Senior Podiatrist focused on DFUs, including admissions via our Accident & Emergency (A&E) department. Many of the patients I see have severe wounds needing urgent treatment.

I have seen amazing results with Urgo products that have benefited patients and their quality of life. UrgoClean Ag and UrgoStart Plus complement each other well, particularly with complicated cases of DFUs.

Previously I would use a 'sandwich' technique, layering a hydrogel and an antimicrobial dressing if the wound was infected or sloughy, but I now only need one Urgo dressing to achieve good results. It is also the only dressing I have seen that can help with exposed tendons.

> "I have seen amazing results with Urgo products that have benefited patients and their quality of life.

Dr Iman Al Lawati's top tips:

- I will always recommend Urgo products to my colleagues – they are one of the best and I would always want them to use them
- Start with UrgoClean Ag and after two/three weeks, shift to UrgoStart Plus to avoid any microbial resistance
- Try using UrgoClean Ag and alternate with NPWT. We have had excellent results doing this
- Urgo products can be worn with sandals.

My patients want to remain wearing sandals as we live in a hot climate, but doing so creates friction and previous dressings would subsequently move. The great thing about Urgo products is how adhesive they are. I can apply a dressing and when the patient comes back, I can see there has been no movement in the dressing and the wound is continuing to heal.

I see UrgoClean Ag and UrgoStart Plus working. These types of dressing help healing and I would definitely recommend them.

Case study 1

Male patient, 54, with diabetes, who was a passionate hiker, presented at A&E with cellulitis of the right foot extending to the ankle with severe pus discharge. Surgical debridement exposed the tendon between the first and second toes [Figure 1]. The wound was failing to heal and removal of the tendon was suggested. The patient knew this would limit function and requested for the procedure to be delayed. Whilst finishing his course of intravenous antibiotics as an inpatient, UrgoClean Ag was discussed as an alternative to surgery. Using the UrgoClean Ag and UrgoStart Plus protocol, UrgoClean Ag was used for 2 weeks [Figure 2]. Treatment then switched to UrgoStart Plus. The wound reduced in size rapidly. I was amazed at the healing, the limited scarring, the colour of the skin and how integrated and healthy looking the wound was. The tissue was not fragile and the patient could see this too. He was compliant, his glucose levels were good and full wound closure was achieved within 12 weeks [Figure 3]. He is now hiking again!

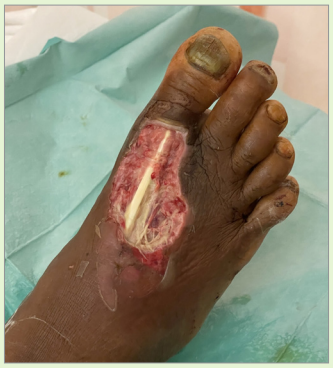

Figure 1: Post-debridement

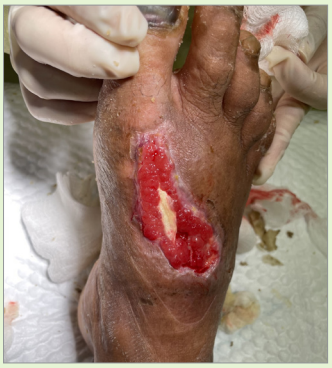

Figure 2: 2 weeks of treatment

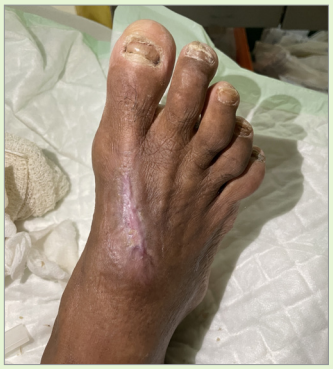

Figure 3: Final review (12 weeks of treatment)

Case study 2

A female patient, 56, with diabetes and hypertension presented with third degree burns after spilling hot oil on her foot [Figure 1]. She had neuropathy and by the time she came to hospital the wound was infected. She had develop cellulitis and needed surgical debridement to remove the necrosis on four toes. The decision was made to start with a honey dressing, but the patient developed a *pseudomonas aeruginosa* infection and there was severe exudate and maceration. The surgical team wanted to remove the tendon as the wound was failing to heal. We decided to try Urgo products first. Using the UrgoClean Ag and UrgoStart Plus protocol, I used a combinations of dressings: UrgoClean Ag on the first (exposed) toe and UrgoStart Plus on the others (superficial). After 6 weeks of treatment, healing progression was noted [Figure 2]. After 9 weeks of treatment, the wound healed [Figure 3] and the tendon did not need to be removed.

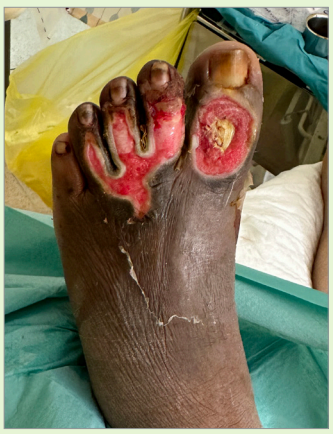

Figure 1: Initial presentation

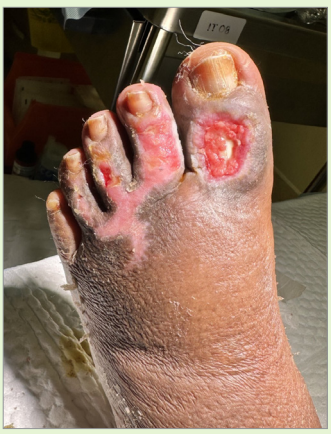

Figure 2: 6 weeks of treatment

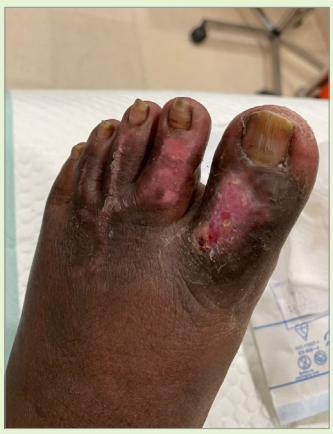

Figure 3: 9 weeks of treatment

Dr. Ashraf Alalim Othuman Zain

General Practitioner, Plastic Surgery Department, Al Qassimi Hospital, Sharajah, United Arab Emirates

> I chose the worst cases we had for this protocol and the results were honestly remarkable. I recommend it.

I work with patients who have chronic non-healing wounds (e.g. DFUs and pressure ulcers) and with comorbidities, including diabetes, hypertension, chronic kidney disease and chronic heart disease. Previously, these patients were treated using techniques such as vacuum-assisted closure and silver and foam dressings to maintain wound cleanliness and promote growth of granulation tissue. UrgoClean Ag and UrgoStart Plus were used where no other dressing or treatment option had proven effective, and I saw remarkable results.

UrgoClean Ag is really easy to use. It's easy to apply and easy to remove. It reduces the smell of wounds quite drastically; exudate is locked within the dressing, keeping the wound cleaner and accelerating the healing process. I only use products on my patients that I can see working with my own eyes – UrgoClean Ag is now one of these products. The remarkable part for me was how quick the products were able to rejuvenate the wounds. Unhealthy and necrotic wounds were transformed by Urgo products. Wounds were red and healthy following treatment.

I would recommend this protocol because it's effective. Plain and simple. It works.

Dr. Ashraf Zain's top tips:

- UrgoClean Ag can be used to remove slough and help in mechanical debridement of unhealthy wounds
- UrgoStart Plus can be used in clean superficial wounds where surgical closure is not intended
- I suggest this protocol now for everybody - particularly for chronic wounds.

My first case was a woman in her late 40s with a severe chronic wound that covered half her left leg. The wound was sloughy and dirty with a bad smell and poor granulation. She had an infection requiring antibiotics; a variety of dressings were previously used (mostly silver and some foam), but these were failing to help heal the wound. I started with UrgoClean Ag. From the first dressing (changed after 3 days), I was shocked at how good the wound looked. It looked almost like a fresh wound. The wound had no slough present and wound colour had changed; there was fresh blood and good granulation – the wound was pink and the bad smell had gone. Within a matter of weeks, the wound was ready for skin grafting and wound closure. The wound nurse said it was remarkable! I felt very proud of this case.

All my patients were really happy with the treatment regimen and could see the positive effect it was having on their wound.

UrgoClean Ag and UrgoStart helped to achieve complete wound closure and patients found the dressings comfortable to wear. I would recommend UrgoClean Ag and UrgoStart Plus to other clinicians as the dressings were effective in accelerating wound healing.

Case study 1

A female patient in her late 60s, with uncontrolled diabetes mellitus type 2, presented with pain, redness in the surrounding skin, oedema, swelling, increased exudate and a long-standing wound that was increasing in size. Infection was diagnosed per the clinical presentation. Perfusion was good, and normal arterial pulses at the foot (posterior tibial artery, pedal dorsalis) were present after tests. The wound was classified as per DFU classification tools – TEXAS (Grade 2-D). The wound measured 13cm (length) x 9cm (width) x 1mm (depth).

Week 0 - The wound was highly exuding with high bacterial load (45% slough tissue and 55% granulation tissue). Pain, malodour, swelling and deep pockets were present, and tendons were exposed **[Figure 1].** UrgoClean Ag was applied and the dressing was changed every 48 hours.
Week 2 - Tendons were no longer exposed, exudate reduced and bacterial load controlled. Following the protocol, the dressing changed to UrgoStart Plus. Granulation tissue formation was significant, reaching almost 75% of the wound tissue. The majority of slough and wound debris was still visible **[Figure 2]**.
Week 4 - After 28 days, the wound was healthy and infection has resolved with moderate exudate. The patient had benefited from the UrgoClean Ag and UrgoStart Plus protocol, and this case was transferred for grafting with patient and physician approval **[Figure 3]**.

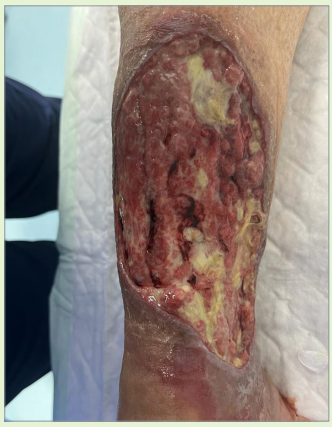

Figure 1: Initial presentation

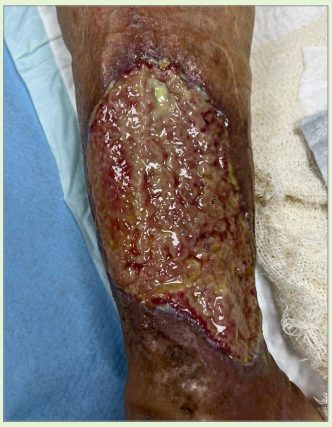

Figure 2: 2 weeks of treatment

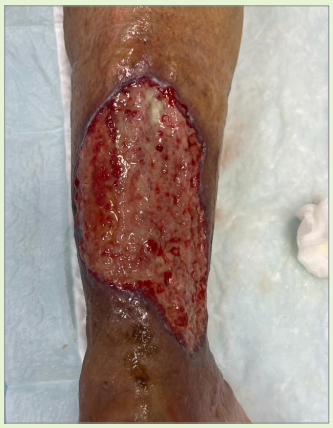

Figure 3: 4 weeks of treatment

Case study 2

A female patient, 72 years old, bed ridden, with comorbidities high lipedema and high blood pressure. The patient presented with two large chronic pressure ulcers. The first was a right trochanter pressure injury. Necrotic tissue was present; stage could not be determined. The wound was bleeding, malodorous and the patient was experiencing pain. The wound had been present for many years; there was swelling and redness in the surrounding area. The wound measured 21cm (length) x 18cm (width) [Figure 1]. The patient was receiving NPWT prior to switching to the Urgo protocol. Pressure injury management standard of care was implemented as per the hospital protocol. UrgoClean Ag and UrgoStart plus were added to evaluate the effectiveness, and were reviewed at two week intervals.

Week 2 – Wound improvement with necrotic tissue reduction was observed. Infection symptoms reduced and pain had significantly reduced [Figure 2].
Week 4 – After 4 further UrgoClean Ag dressing changes, the wound looked healthier and infection had resolved.
Week 8 – After 4 further UrgoStart Plus dressing changes, healing was greatly improved [Figure 3].

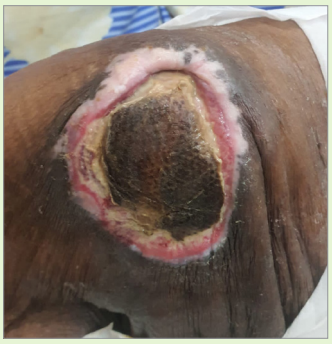

Figure 1: Initial presentation

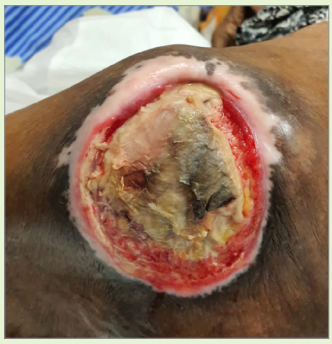

Figure 2: 2 weeks of treatment

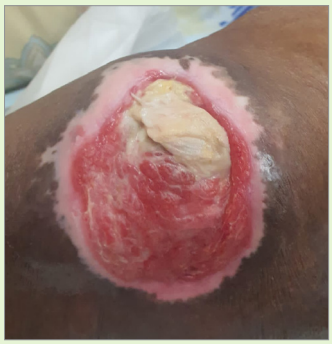

Figure 3: 8 weeks of treatment

The second wound was a Stage 3 left heel pressure injury. The wound presented with significant amounts of sloughy tissue, bleeding and malodour. The patient was experiencing pain and the wound had stagnated, with swelling and redness noted in the surrounding area. Hyper-granulation tissue was present and the wound measured 10cm (length) x 11cm (width) x 2cm (depth) [Figure 4]. The patient was receiving NPWT prior to switching to the Urgo protocol.

Week 2 – By using UrgoClean Ag, the wound had improved with a reduction in necrotic tissue [Figure 5]. Infection symptoms and pain were significantly reduced.
Week 4 – After 4 further UrgoClean Ag dressing changes, the wound was healthier and infection had resolved. Treatment was then switched to UrgoStart Plus.
Week 8 – After 4 UrgoStart Plus dressing changes, healing had significantly improved and the wound had healthy red granulation tissue [Figure 6].

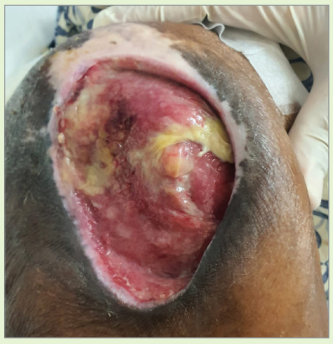

Figure 4: Initial presentation

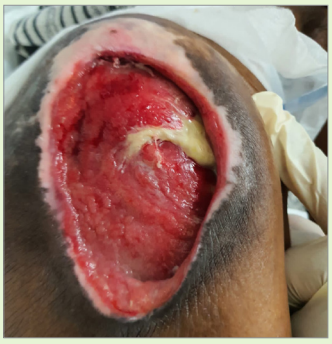

Figure 5: 2 weeks of treatment

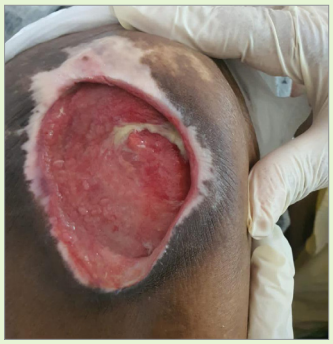

Figure 6: 8 weeks of treatment

CONCLUSION

This document illustrates real-world outcomes from cases across the Middle East, implementing the sequential continuum of care with UrgoClean Ag® and UrgoStart Plus® in practice.

The real world evidence demonstrates that the treatment range can:

- Prevent and manage local infection with the combined antimicrobial and complete cleaning action (anti-biofilm)
- Improve healing and wound closure rates
- Avoid the need for amputation
- Be applied with ease, is comfortable during wear time and pain-free at removal
- Enhance patient quality of life
- Increase clinicians' satisfaction.

WOUNDS | MIDDLE EAST