

Quiz the experts: The role of non-medical dressings for the management of wound infection

Answered by Professor Hans Smola, Cologne University & Medical Director of HARTMANN Group

In addition to the impact on AMS - do you see cost saving potential if we can integrate the use of NMWD into daily practice?

On average there should be a cost advantage of NMWD vs medicated ones. Still, in our opinion, the real advantage will come from better resource allocation. Hitting hard on infected wounds while saving resources on wounds that can be treated without antimicrobials.

Where can I download the WUWHS Position Document?

You can download it here: <https://www.woundsinternational.com/resources/details/the-role-of-non-medicated-dressings-for-the-management-of-wound-infection>

Do we still need plastic surgery or wound grafting for highly possible wound closure in diabetic foot wounds?

A very good question. From our experience, many patients struggle to get appointments in plastic surgery. If available, I think surgical intervention can speed healing.

Should blisters with fluid or pus be drained and treated as open wounds?

I would recommend to open blisters with pus and treat as open wounds. For small blisters (with clear blister fluid) you can leave them closed but most will eventually rupture or become colonized and pus forms.

What evidence is used to support the use of NMWDs to support low resource countries?

The WUWHS Position Document on Role of Non-Medicated Wound Dressings represents excellent guidance for the use of NMWD in wound infection management. The document uses clinical data from a large number of published clinical studies demonstrating the benefits of NMWDs.

How to manage wet legs when the person has alcohol issues? What would be the best product, as the dressings we have tried are sticking. We are using compression. They also have dermatological skin issues, which is making things very tricky. This is a person in the community setting. Has had a few admissions for IV antibiotics with minimal effect. Thank you.

From the question, I take that the wound and surrounding skin is moist and exudation may be an issue. Here, I would recommend a highly absorbing superabsorber-containing dressings such as e.g. Zetuvit Plus. These dressings are very well suited to work with compression. Of course, presence of allergies needs to be considered and allergens (in dressings and topical therapies/ointments) are to be avoided.

What do you think has to change in order to avoid general practitioners prescribing oral or parenteral antibiotic treatment when infected wounds? They don't allow us enough time (days, weeks) to treat locally with silver products or PHMB or DACC technology ... (and they often forget about general measures like improved nutrition, glycaemic control etc)

A very good point here. When the evidence is out and antimicrobial stewardship recommends restricted prescription of systemic antibiotics, it comes to the implementation bottleneck. Our recommendation is a patient centric approach and convincing each of the involved clinicians to consider a holistic treatment approach.

When do we need to think about applying a medicated dressing?

Following the correct wound assessment and identification of clear signs of local infection medicated dressings may be recommended.

What is the best dressing for a wound located around a gastrostomy stoma?

This is a clinical challenge and the corrosive effects of gastric juice on the stoma area is a real concern. There are several approaches, which reflect the state of the peristoma area. If the skin is intact hydrocolloid-types of dressing cut to size may be well suited. If the area is inflamed, a highly absorbent dressing and protective topicals (even consider zinc paste) may help to limit the assault on the skin barrier.

Although perhaps not strictly a "non-medicated wound dressing", could the application of topical oxygen to promote wound healing play a role in combating anti-microbial resistance?

Indeed, topical oxygen is a novel therapy option and it might help to clear anaerobic bacteria. Still, we need to see the outcomes of clinical studies investigating the full potential of topical oxygen.

In your opinion, which is the most beneficial non-medicated dressing to use in a pseudomonas wound infection?

Indeed, this is a clinical problem. As for the NMWD selection I would consider the level of exudation. If not excessive, I would recommend a preactivated polyacrylate-containing dressing such as HydroClean. If exudation is high a superabsorber dressing such as Zetuvit plus might be an option.

What are your thoughts on the use of Betadine soak or Microdaysin for wound infections?

Please have a look at a recent paper on Pseudomonas infections in diabetic foot ulcers

(<https://pubmed.ncbi.nlm.nih.gov/31155991/>;

<https://pubmed.ncbi.nlm.nih.gov/29618862/>;

<https://pubmed.ncbi.nlm.nih.gov/23999348/>). Pseudomonas is very sensitive to an acid environment. So, dressings that are slightly acidic or soaks at dressing change can modulate the wound environment. Superficial Pseudomonas colonization will be eradicated with time in not in all but many patients

Will copper dressings replace silver releasing dressings in the near future?

An interesting approach. Still, clinical studies will have to show superiority and safety of copper-based dressings vs. silver-based dressing. If copper-based dressings are better than silver dressings, I could imagine practice might shift.

What is the best treatment for wounds that is always in contact to excrements?

A difficult practical question. Before any dressing is applied, the wound must be cleaned very thoroughly. Our recommendation is to consider a tightly sealing dressing category such as hydrocolloids. The wound is protected from direct contact with urine or stools.

Chronic wounds, especially leg ulcers, with or without chronic diseases, are often neglected by doctors and specialists. They are left to nurses who run out of options with no support, assistance or advice from other members of the multidisciplinary team. What should such nurses do?

There are lots of resources available to support education such as online webinars, workshops and conferences, and video services such as TVN-TV and Wounds International-TV. There are also freely available International Consensus and Guidance Documents provided by accredited wound medical associations that will support better clinical reasoning and therapeutic decisions. You can ask and learn from expert nurses in the field of wound care.

Could you reassure us about the use of iodine dressings in surgical wounds with staples?**There is risk for oxidation?**

This is a good question! A definitive answer can only come from the manufacturer of the staples actually used. The materials can differ and show different susceptibility to oxidizing and iodine agents.

How can we change the minds of people who always want to use medicated dressings or oral antibiotics when they are not necessary?

Antimicrobial stewardship is a good example. Slowly clinicians became aware of the benefits for patients. We hope that NMWD might go the same route.

Are there any situations where a medicated dressing would be more appropriate than a NMWD?

In our opinion, medicated dressings have a perfect place when the diagnosis is clear and infection is present. Systemic antibiotics and antimicrobial dressings are a good combination. Unfortunately, antimicrobial dressings are often overused when no clear infection is present.

Do I need to debride the wound if the non-medicated wound dressing debrides the wound in its mode of action?

The role of NMWD is to support the endogenous debriding mechanisms - even after surgical debridement, NMWDs safeguard that non-viable tissue that is left behind is removed.