

USING POLYMERIC MEMBRANE DRESSINGS TO SOLVE PROBLEMATIC SKIN DAMAGE FROM GASTROSTOMY LEAKAGE ON ELDERLY PATIENTS



Charalambos Agathangelou, MD. PhD. Gerontology,
ARITI Center of Assisted Living, Rehabilitation and Wound Care (Nicosia, CYPRUS)

INTRODUCTION

Leakage of gastrostomy contents is very common in elderly patients. This is particularly true for elderly with dementia as they usually try to pull out their tube causing leakage of the gastric content. This leakage is malodorous and acidic and often leads to maceration, excoriation, pain and damage of the peristomal skin. Despite the use of barriers creams, gastric leakage can lead to the development of painful wounds. When using a VAS pain scale, looking back two years, 88% of our 60 alert patients reported a pain score of 8. All of our patients or their family members were disturbed by the odour.

The gastric leaks resulted in frequent changes of over-saturated, leaking wound dressings, and time consuming and costly washing of soiled clothes.

AIM

Our goal was to increase the quality of care for our patients with gastrostomies by: minimising their discomfort, including pain, tenderness, and itching at and around the gastrostomy site; reducing odour; absorbing leakage; reversing peristomal maceration when present, and preventing further maceration of the peristomal area; and healing the surrounding skin. We want our patients' gastrostomy sites to be so comfortable that they do not attend to the site or the dressing or even notice them, so they therefore leave the site and dressing alone.

METHOD

We evaluated polymeric membrane dressings* (PMDs) on 10 patients of which 3 had severe dementia causing them to constantly pull out their tube and surrounding dressings. The other 7 had problems with leakage; 3 with excessive leakage and 4 with moderate leakage. The PMD dressings were usually changed on a daily basis. In the 3 cases with extremely high amount of leakage, a superabsorbent pad was placed on top of the PMD in order to absorb the leaked gastric content; these dressings and the superabsorbent pads were changed every 12 hours.

Initially PMDs were considered because of their absorbency. However, the dressings have been shown to reduce pain, tenderness, signs of inflammation, and itchiness when applied to peristomal and peri-wound skin. Additionally, the dressings have been shown to provide so much comfort to clients suffering from dementia that they usually stop picking at the dressings shortly after PMDs are placed on their skin tears. These reports from other clinicians suggested that the dressings should be considered to help resolve our clients' problems.

RESULTS

All alert patients reported a reduction of both pain and odour at their gastrostomy sites as well as rapid healing of surrounding skin. Pain, which reduced within 72 hours from a level of 8 down to 3 on a VAS scale, was mainly caused by the excoriated skin around the gastrostomy tube.

The surrounding skin became intact within 3 to 10 days, depending on the severity of the initial damage. The 7 alert patients reported that the dressings felt very comfortable, but more importantly the gastrostomy site also was comfortable. The 3 patients with dementia no longer showed any signs of trying to pull out their tubes or remove their dressings; therefore, we assumed that this was an indication that the gastrostomy site was comfortable for these clients. The family members of the clients with dementia also indicated that they noticed the odor was greatly improved with the use of the PMDs.

DISCUSSION

Even with the use of a special belt to keep the gastrostomy tube in place, elderly patients often dislodge or pull their tube resulting in gastrostomy leakage. We have found that leaking gastric fluids has a negative psychological impact on our clients and families. Very often, the elderly refused to go out of their rooms to join other people as they were embarrassed by the continuous soiling and staining of their clothes. The presence of an odour was also affecting their relationships with other residents. Now, after implementing PMDs, the clients no longer pay attention to their gastrostomy sites because the sites are no longer uncomfortable or create an odour.

After changing our regime to use PMDs, we now have more confident, social patients in our nursing home. As an unexpected positive side effect of changing to use of PMDs, we have decreased our cost of laundry by 15%.

References

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*PolyMem® Wound Dressings. Manufactured by Ferris Mfg. 5133 Northeast Parkway, Fort Worth, TX 76106, USA. This case study was unsponsored.

A 75 year old man with a PEG due to esophageal cancer; he had problems with pain and irritation around the tube caused by leakage. Embarrassment prevented him to leave his room. Our goal was to educate his wife to take care of his gastrostomy, heal the irritated skin and motivate the patient to return to his normal daily activities. We prescribed an acid suppression proton pump inhibitor in order to reduce gastric acid secretion and started to treat him with PMDs. PMDs are preferable to gauze or simple foams as they reduce pain by effecting the nociceptors, facilitate faster healing and drain fluid away from the skin; gauze on the other hand tends to trap the fluid onto the skin causing more irritation and maceration.



The wound around the tube was very painful and had been exacerbated by the use of gauze that had stuck to the wound. Both the patient and his wife were very nervous when it came to handling this area and the wife was initially reluctant to try anything new.

We prescribed PMDs, not only to reduce pain and facilitate faster healing, but to make it easier for his wife during dressing changes as there is no need to clean the wound during changes due to the built in cleanser in the dressings.



The patient reported a reduction of pain hours after the first dressing application. On day 2 his pain had reduced from an initial level of 7 down to 2 according to VAS. The wound around the tube was no longer irritated and showed signs of healing.

Day 6 with PMDs and the patient no longer felt any irritation or pain at all. The leakage was under control and he felt confident enough to leave his home. The couple was no longer anxious when it came to handling the PEG.

An 85 year old severely senile dement woman who was constantly pulling at her tube which resulted in leakage and irritation of the surrounding skin. At this occasion she had pulled out her tube and a catheter was used as a temporary solution since the regular gastrostomy tubes were not available. Her family complained about soiling of clothes and unpleasant odour. The frequent changes of clothes disrupted her normal routine and caused her to be even more agitated. The safety belt that was supposed to keep the tube in place did not help.



The skin around the catheter is swollen and irritated due to the constant leakage of gastric content. Here seen with the temporary catheter. A PMD was applied covering the damaged skin around the tube.

The next day we noted a reduction of irritation and redness. The gastric content had been successfully absorbed by the PMD preventing further maceration and excoriation of the surrounding skin.



We could now replace the catheter with a gastrostomy tube as they were finally available again. The surrounding skin is almost healed and displays no signs of irritation. There is no longer any problem with soiled clothing and the patient has stopped trying to pull out her tube; we take this as an indication that the dressing was comfortable and pain reduced to a minimum.