



# Sorting Out a Sore Situation

Clinical trials now offer a promising solution for bed sore care and prevention.

By Rohini Pathmanathan

**I**f asked, most of us who have experienced a stint in a hospital bed would admit the experience to have been a formidable one. In addition to having to contend with astronomical medical bills, being away from family and loved ones can be an isolating experience, especially if you are required to be an inpatient for a prolonged period of time. To further complicate matters, people who are long-term inpatients and who are hospitalised for chronic health issues often suffer a loss of mobility, which results in many hours spent lying in the same position. This in turn gives rise to a common but challenging complication: bed sores.

### WHAT ARE BED SORES?

Bed sores, also known as pressure ulcers in more medical lingo, are skin lesions that develop when the blood flow to certain areas of the body is impaired. "About two percent of all non-ambulatory cases are at risk for bed sores," notes Dr Harikrishna K.R. Nair, Head of the Wound Care Unit at Hospital Kuala Lumpur and President of the Malaysian Society of Wound Care Professionals (MSWCP). "Bed sores occur when there is unrelieved friction or pressure on certain parts of the body. Areas with bony protuberances or more cartilage such as the elbows, knees, ankles and the back tend to be most affected."

### WHO IS MOST AT RISK?

#### ■ **Obese/ overweight individuals** –

Obese patients are often at a heightened risk for bed sores because of their greater skin-weight ratio and more profuse distribution of adipose tissue. It is the latter which impairs wound healing and the former which increases their risk for skin physiology changes. "Obese patients also find it more difficult to turn over in bed, leading to persistent friction between their bodies and the sheets," says Dr Harikrishna.

■ **Type 2 diabetics** – Individuals suffering diabetes tend to have impaired blood circulation which slows down the natural healing process. Due to



decreased sensation in their hands and feet, diabetic patients tend not to notice injuries or sores, and often do not seek treatment for these skin problems until they have developed into advanced stages of inflammation.

■ **Individuals of advanced age** – Old age comes with a host of problems, the most common of which tends to be multiple ailments. “Due to numerous health complications, these individuals are also at a greater risk for multi-drug resistance, which can further impede the healing of bed sores,” notes Dr Harikrishna.

■ **Malnourished individuals** – “Good nutrition is crucial for effective cell and tissue repair,” emphasises Dr Harikrishna. “How can your body heal if you don’t eat or insist on eating foods with little or no nutritional value?”

■ **Coma and surgery patients** – “Post-op patients often have to spend considerable amounts of time in one position to avoid tearing out their stitches or causing their surgical sutures to come undone. Though routine bed-turns by nurses are done every two hours, post-surgical patients are still at a risk for bedsores,” notes Dr Harikrishna. “And in the case of the former? Well, that should be pretty self-explanatory.”

### TREATING AND MANAGING BED SORES

Nipping bed sores in the bud as early as possible is important to prevent infections from developing. Though bed sores are not life-threatening in and of themselves, they *can* turn deadly if infected. Though early-stage bed sores are quite treatable, managing the condition in later stages is more of a challenge. According to Dr Harikrishna,

## BED SORE MANAGEMENT DOS AND DON'TS

### DO

- “Keep an eye out for areas of the body that develop redness. This is an early sign of inflammation and a warning cue that these areas of redness may be a precursor to bed sores,” advises Dr Harikrishna.
- Keep skin clean and dry. Changing damp clothes and bed-sheets regularly helps minimise the risk of bed sores occurring or recurring.
- Use pillows to help elevate different parts of your body and improve blood circulation.
- Eat well. A diet rich in healing nutrients such as the B-group vitamins, vitamin C and protein is essential for tissue repair.
- Use a treatment lotion every day to moisturise skin around the bed sore and to form a protective moisture barrier over it. “A collagen and glycerine-based solution works best for both prevention and treatment measures,” notes Dr Harikrishna.

### DON'T

- Lie in the same position for long periods of time. “If illness or an operation has rendered you immobile, ensure that caregivers or qualified health professionals are on hand to help you change positions every two hours,” says Dr Harikrishna.
- Wait to inform your caregiver that you’ve soiled yourself. The spread of bacteria from urine or faeces can turn a mild bed sore into a rampant infection.
- Smoke. Smoking impairs blood circulation which reduces active flow of blood to the skin. This in turn slows the healing process.



when a person is admitted for a hospital stay, a skin risk assessment is conducted to determine his or her risk for developing bed sores. This is followed by routine two-hour check-ins by nurses to help patients switch positions in bed.

“Bed sores are a nuisance because they tend to recur frequently,” he says. “What’s more, many patients who develop bed sores also struggle with incontinence. If left unwashed or unattended for too long, bacteria from urine and faeces will seep into the sores, causing infection. This tends to be more

of an issue for home-care patients who have to rely on their family members instead of qualified caregivers for assistance. The nursing care provided at hospitals is consistent enough that the risk of bed sores is minimised.”

### Healing Bed Sores with Collagen and Glycerine

Clinical trials have shown great success in using a collagen and glycerine-based solution for bed sore treatment and management. As the trials’ lead researcher and author, Dr Harikrishna reports that both trials, which were

## HEALTH FEATURE

conducted at HKL over a period of three months to assess the suitability of the collagen and glycerine solution, showed significant improvement in the prevention, treatment and management of active bed sores. "Whether the bed sores were acquired in the hospital or at home, the lotion, which comprises 10 percent collagen, 40 percent water and 50 percent glycerine, provided effective relief for patients both in the short-term and the long-term," he enthuses.

The lotion has a few main positive effects which include the prevention of bed sores on dry skin areas, and the effective healing of Stage 1 inflammation and redness and Stage 2 partial skin loss. Stage 1 pressure injuries are bed sores in their beginning stages.

The lotion also proved beneficial in moisturising the affected area and safeguarding tissue integrity. Improvements in skin pigmentation, scarring as well as reduction in wrinkle depth were also seen.

"One of the main functions of the lotion is to restore depleted levels of collagen in the skin," notes Dr Harikrishna. "Premature collagen loss tends to be quite pronounced in diabetics who, as we know, are at a heightened risk for bed sores due to poor blood circulation. However, this does not mean that people who are not diabetic can't use the lotion to great effect as well. To add to an already impressive list of benefits, the lotion is also mild, gentle and suited for long-term use. Prevention is crucial so making daily use of a collagen and glycerine solution is ideal, whether you are receiving care in a hospital or in the comfort of your own home."



**Prevention:** Classic signs of Stage 1 bed sore.



**BEFORE**

**AFTER 9 DAYS**

**Treatment:** 54 year-old male, Stage 2 bed sore (hip region)



**BEFORE**

**AFTER 1 WEEK**

**Treatment:** 67 year-old female, Stage 2 bed sore (buttock region)



**BEFORE**

**AFTER 6 DAYS**

**Treatment:** 63 year-old male, Stage 2 bed sore (lower spine region)

# Battling *Bed Sores*

**T**here can be no greater pleasure than whiling away time in bed without a care in the world. However, extended periods of convalescence for a purpose other than pleasure can be a tad less enjoyable. Apart from boredom, individuals who find themselves confined to bed due to illness or loss of mobility often find themselves battling bed sores. If left untreated, these unsightly injuries which result from unrelieved pressure can go on to develop into infectious patches that cause significant pain and discomfort.

## Treating Bed Sores

The most important thing to remember about bed sores is that they are easily treatable – if detected and managed in their beginning stages. UK and US medical authorities now recognise bed sores as the second leading iatrogenic cause of death after drug reactions. Iatrogenic causes refer to unexpected deaths that result from a medical treatment. This is a significant concern, as most people tend to develop bed sores due to prolonged periods lying in the same position, often after an operation or while in the throes of a chronic, immobilising illness.

Help is now available in the form of a unique solution boasting a potent combination of collagen and glycerine. Clinical trials at Hospital Kuala Lumpur report that the use of a collagen and glycerine-based solution for treating the inflammation, redness and other debilitating aspects of bed sores has been effective in the active treatment and management of the condition. Lead

trial researcher Dr Harikrishna K.R. Nair sheds light on just how this unique skin-protecting formulation helps heal and prevent a recurrence of bed sores.

## **Q** What makes collagen and glycerine so effective in treating bed sores?

Collagen is essential for skin rejuvenation and repair as it penetrates the dermis deeply to deliver its healing qualities. It treats both the superficial (epidermis) and deeper dermal layers, healing from the inside out. Glycerine is a powerful ingredient that binds water for superior moisturising effect. When applied over dry, cracking skin or open sores, it forms a protective barrier over the skin, sealing in moisture and preventing further irritation.

## **Q** In addition to bed sores, does the solution treat other types of skin disorders?

Yes, a combined collagen and glycerine formula is also effective in treating dry skin, hyperpigmentation, swelling and inflammation from infections or bites, and as well as a range of sores and lesions. It can also be used on dry heels, blisters and calluses.

## **Q** How soon will I be able to see results?

Improvements to the affected skin areas should be seen in one or two months' time. The

most significant changes experienced by patients who participated in the clinical trial were seen within four to eight weeks. Expect more moisturised, comfortable skin and visibly reduced inflammation from the very first day of applying the solution.

## **Q** How safe is the formula?

The collagen and glycerine-based formula is hypoallergenic and non-comedogenic, making it suitable for even the most sensitive skin.

