

ThermoReversible BioRelease® Hydrogel Is Effective In Deep Tunneling Wounds

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BACKGROUND

The patient is a 54-year-old female who had a surgical procedure for back pain with fusion of the lower back in 2017. The patient subsequently had multiple procedures from the orthopedic and neurosurgeons for infected hardware which had to be removed. The patient was first referred to the wound care clinic at Tucson Medical Center in 2018.

The patient was then later referred to our clinic in mid-2018. At that time the donor site for the pelvis was infected along with the wound. Multiple procedures and partial closures of the wound were performed over the next four years. In 2020 the patient moved out of state and was lost to follow up. Six months later the patient returned to Tucson where her care was initiated again. At this time the patient had multiple weekly visits for debridement at our wound care clinic. The care involved amniotic tissue and multiple debridements. These treatments showed some improvement for short periods of time. Two secondary closures were performed, however each time the wound reopened and was infected.

PROTOCOL CHANGE

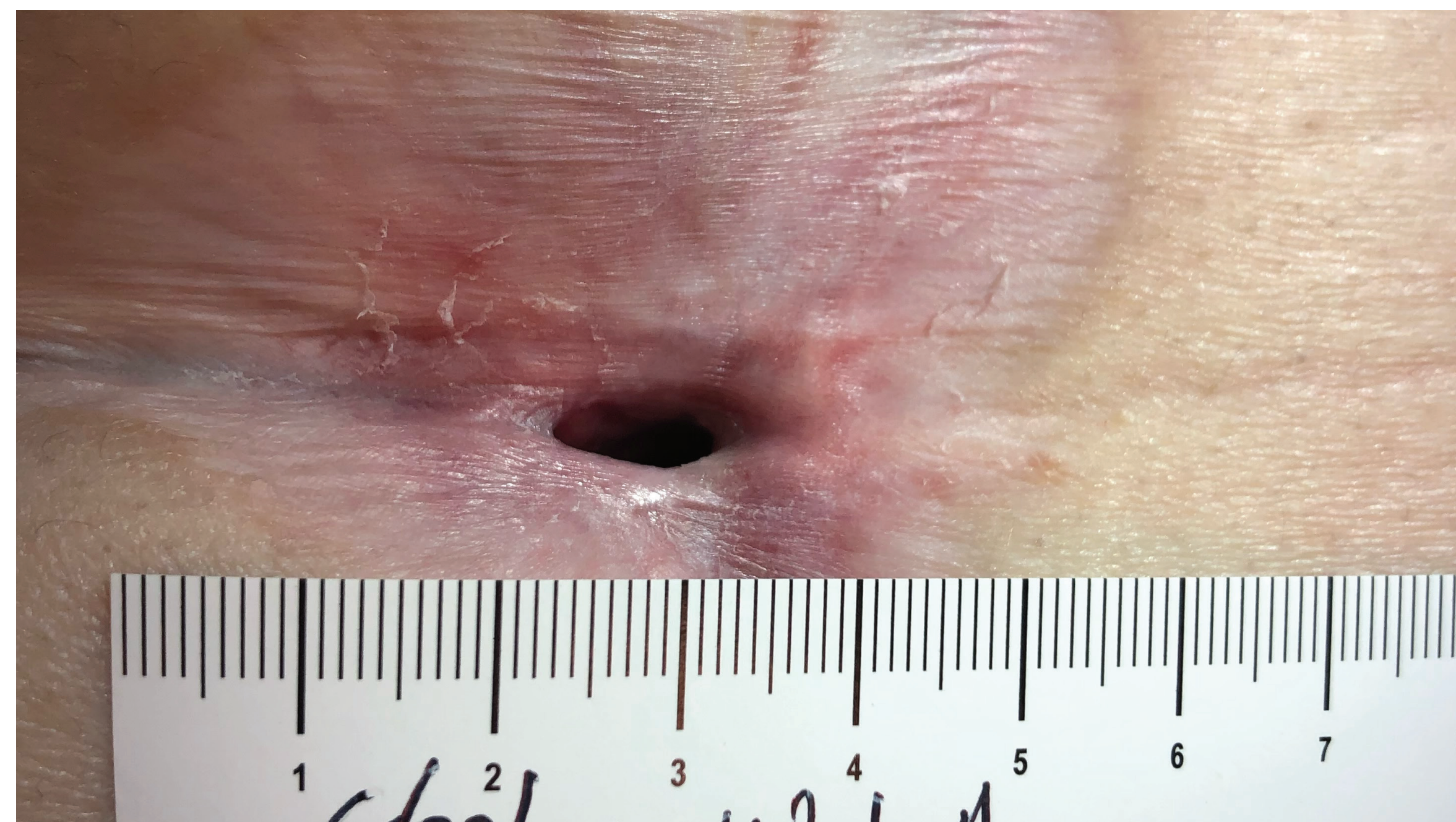
The patient's wound progress became stagnant with no significant change from January to August of 2022. At that time a new protocol was initiated. The wound was debrided and a regiment of BioRelease® Foaming Cleanser and BioRelease® Wound Hydrogel was initiated. The wound was re-cleansed every three days and the wound hydrogel was re-applied.

OUTCOME

At commencement of the protocol change in August the width of the wound was 1.5 cm and the depth of the wound was 1 cm. These measurements had been relatively constant with no significant change since January. With the commencement of treatment improvement was clearly visible and was progressing toward closure within weeks. As of 11/11/22 the width of the wound has reduced to 0.8 cm and the depth of the wound has been reduced to 0.4 cm. Based upon the patient's previous response to treatment, the use of BioRelease® Foaming Cleanser and BioRelease® Wound Hydrogel provided a much better outcome with rapid improvement of the wound healing.

CASE STUDY

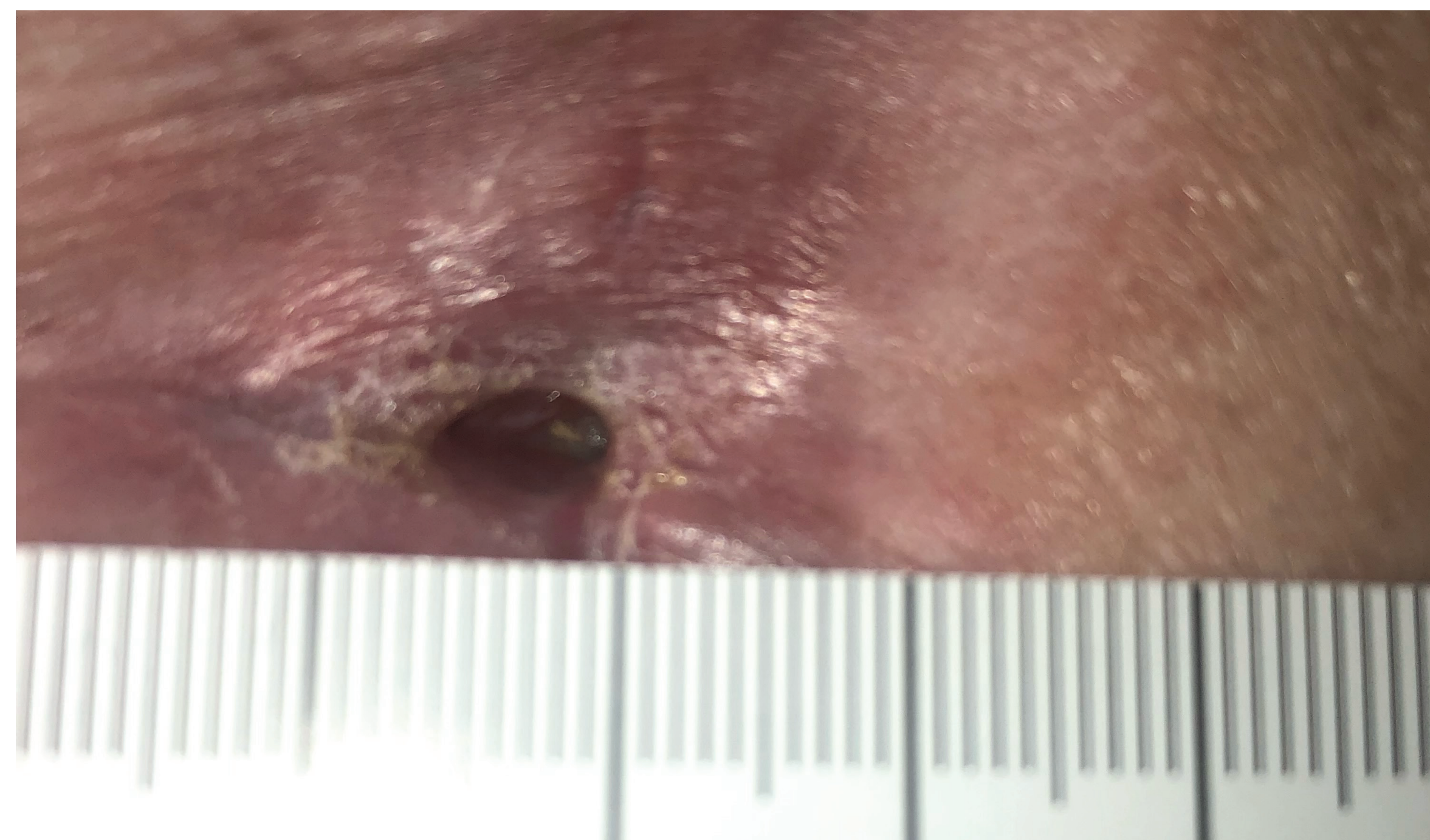
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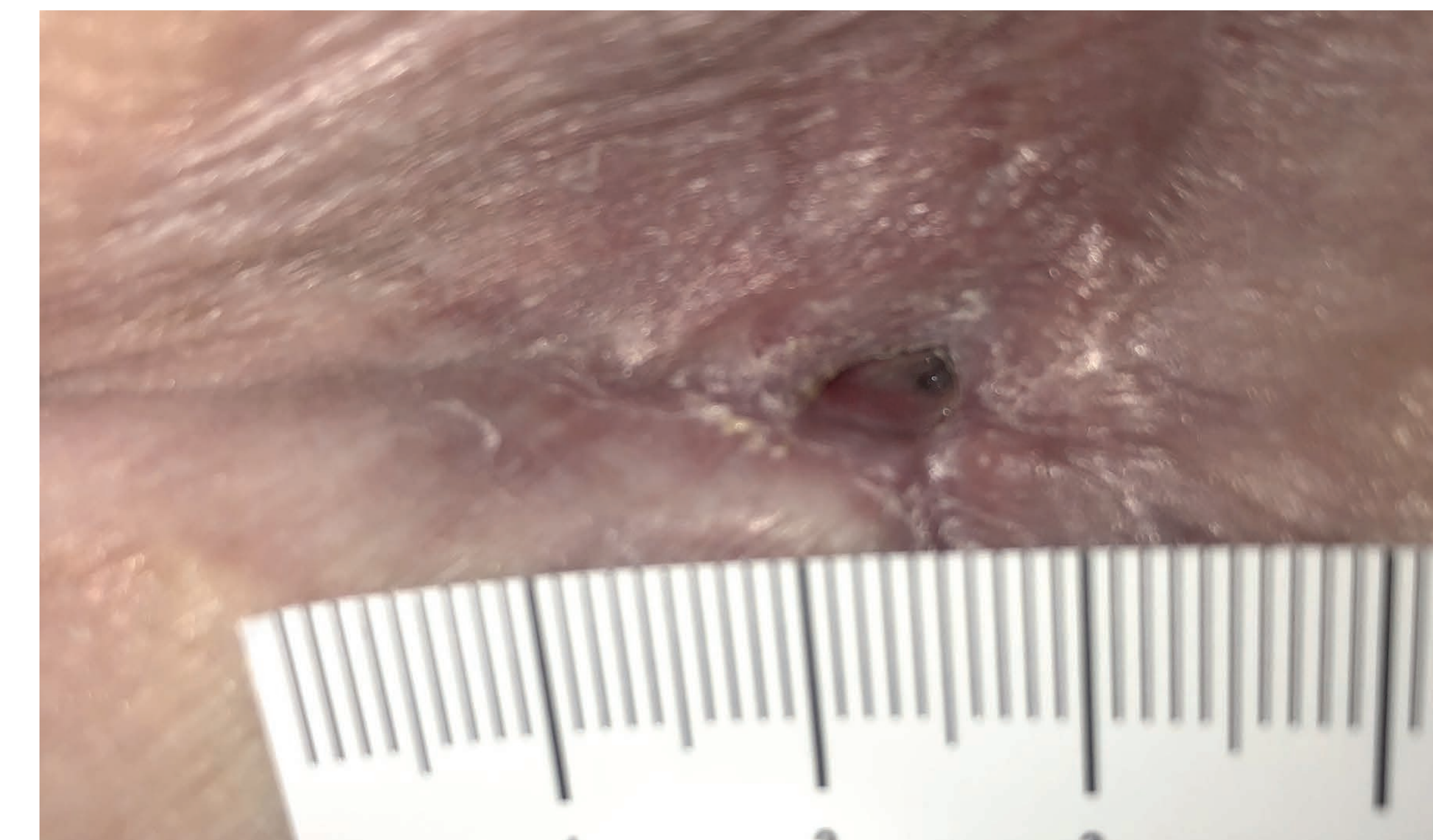
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11/11/22



11/18/22



DISCUSSION

The patient's wound was irregular in shape and had aspects of tunneling. Previously selected treatments did not adequately fill the wound space or stay in constant contact with the wound bed. BioRelease® Wound Hydrogel formed an identical mold of the wound's shape and stayed in place due to its thermodynamics. When the product was applied, at room temperature, it was water thin. Once within the wound, at body temperature, a thick perfectly molded gel quickly formed. The wound environment remained moist, pH compatible and temperature stable. This combination caused the wound to reactivate its normal healing process and close within weeks.

PATIENT ECONOMIC STUDY

AW had a surgical procedure for her back that became infected, and the hardware had to be removed. The patient's chronic wound was being treated for five years with the standard of care with no significant improvement.

Previous costs and treatments lasted five years:

1. Office Visits: \$24,800
2. Debridement Costs: \$25,900
3. Product Cost: \$14,400
4. Surgery Cost: \$110,000

Approximate total: \$175,100

New Treatment Protocol:

The patient was changed to: BioRelease & Fentonite (AgFresh)
The wounds were cleaned, and dressings were changed 3x a week.

Costs After Four Months of Treatment

1. Office Visits: \$1,984
2. Debridement: \$2,400
3. Product Cost: \$400

Approximate total: \$4,684

The original treatment was 2.5 times more expensive per month than the McCord System, and the McCord System healed 15 times faster!



INVESTIGATORS

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