

## BACKGROUND

Lactational mastitis is a painful, debilitating condition that, if inappropriately managed, may lead women to discontinue breastfeeding prematurely.<sup>1</sup> Observational studies conducted in the USA<sup>2</sup>, UK<sup>3</sup>, Finland<sup>4</sup>, New Zealand<sup>5</sup> and Australia<sup>6</sup> suggest that up to 20–25% of breastfeeding women will develop mastitis during the course of lactation and approximately 20–35% of women who develop mastitis will experience recurrent episodes<sup>6-7</sup>. Traditional treatment methodologies involve the use of antibiotics, antifungals and traditional wound care therapies.<sup>7</sup>

This case study demonstrates the use of an advanced therapeutic breast pad composed of multiple active ingredients to heal the abscess and provide pain control, in conjunction with appropriate antibiotic therapy.

## CLINICAL HISTORY

The patient is a healthy 29 year old who presented to the breastfeeding clinic as a Gravida 2, Para 2, post-partum day 4 with complaints of bilateral sore nipples from breastfeeding. Primary nipple protection used was an ultra-thin, soft silicone device.

### Post-Partum Days 7-16:

Patient returns to the clinic with complaints of escalating burning pain during breastfeeding. Clinical assessments revealed the nipples were glossy and slightly edematous with areas of superficial tissue breakdown. The right breast revealed a 3x7 cm area of redness that was firm to palpation. The left breast revealed superficial tissue breakdown in the center of the nipple and a 3x7 cm area of redness that was firm to palpation.

The infant was evaluated and found to be negative for oral fungal infection, but the decision was made to begin maternal antifungal treatment and to initiate use of an advanced therapeutic breast pad that has been proven to provide continuous cleansing, moisturizing, absorption and possesses topical analgesic effects.

On Day 10 patient presented with new onset of intermittent fevers with extension of tissue redness on the left breast. Diagnosis is mastitis and treatment with Macrobid, Alvedon and Ibuprofen was initiated. Wound aspiration and milk cultures taken on day 10 revealed Staphylococcus Aureus and Group B Streptococcus.

**Post-Partum Days 17-80:** Patient returns to clinic with increasing redness, warmth, pain, edema and soft tissue necrosis. The abscess is surgically opened, cleaned and a pigtail drain inserted. The patient received 3 grams Benzylpenicillin IV and was sent home with an oral prescription to continue antibiotic treatment. The Nursicare® Therapeutic Breast Pad was placed directly over the wounded tissue and the nipples. The patient returned to the clinic on day 19 for a dressing change and immediately noted a decrease in pain.

Within the first 4 days of treatment, the wound was clean, well-vascularized and new granulation tissue present. Granulation tissue was at surface by day 40 with increasing epithelialization. The wound care continued with simple cleansing and replacement of the Nursicare® Therapeutic Breast Pad until complete closure was accomplished by treatment day 80.

## DISCUSSION

Traditional clinical management of lactational



Day 17: 3x5 cm abscess drained



Day 19: Wound care, Nursicare & Antibiotics



Day 23



Day 40



Day 80

mastitis with abscess development involves antibiotics, microbial management, debridement of necrotic tissues, exudate management, periwound maintenance, and pain control via pharmacokinetic therapies. Modern wound care dressings and costly therapies are utilized for prolonged periods of time, in conjunction with pharmacological therapies for bioburden and pain control. The use of simple breast pads and creams offer no therapeutic benefits in these cases. Nursicare® Therapeutic Breast Pads provide a unique combination of the benefits of a hydrophilic polymeric membrane pad with active ingredients that work synergistically to decrease nociceptor stimulation<sup>9</sup>, thus decreasing or eliminating pain. The components have also been proven to inhibit inflammations, provide continuous cleansing, maintain moisture and absorb fluids which assists with wound exudate and leakage of breast milk. The authors believe the use of the Nursicare® Therapeutic Breast Pads played an important role in optimizing the healing environment and providing a rapid decrease in bioburden, inflammation and pain.

## References

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