### On the case...

# Breastfeeding complications in a Filipino American patient

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M, a Filipina American, had her first child 6 days ago via Cesarean section at 38 weeks' gestation for breech presentation. She contacted the clinic for a telehealth appointment with the women's health nurse practitioner (WHNP) for bilateral nipple soreness. LM reports her pain level is 7/10 while breastfeeding, then decreases to 4/10 between feeds.

During the first 4 days of life, the infant was feeding every 2 to 3 hours for 30-minute intervals. LM's nipples started cracking and blistering yesterday. She uses the football hold for most feeds and finds this position most comfortable given her postsurgical state. She has been taking acetaminophen, ibuprofen, and oxycodone for pain but has started to wean off this pain regimen for fear of passing the medication to the infant through her breast milk.

LM lives with her husband and her mother. Living in multigenerational households is common in Asian families.<sup>1</sup> LM received advice throughout her pregnancy from her mother, as well her "titas" and "ates," (aunties and older sister figures), relationships which hold respect and gravity in the collectivist nature of Filipino culture, even if not by blood.<sup>2</sup> LM has been told by the female elders in her family to avoid colostrum because it is believed to be dirty and not nutritious.<sup>3</sup> LM's mother has been giving her tea made of "malunggay" (moringa), commonly used in the Philippines to induce or promote the secretion of mature milk.<sup>4,5</sup>

#### Health history

LM's pregnancy was uncomplicated. LM's postpartum complete blood count was normal except for a slight elevation in white blood count of  $13.0 \times 109$ /L, and postpartum hemoglobin was 9.4 mg/dL. She was scheduled for a follow-up postpartum visit 14 days after her discharge from the hospital.

#### **Physical exam**

Using her own thermometer, blood pressure cuff, and watch, LM reports her vital signs as: temperature 98.6°F, blood pressure 128/68 mm Hg, pulse 72 beats per minute. Via telehealth video, the WHNP assesses LM's breasts noting that both nipples appear cracked, erythematous, and blistered. The infant appears to be latched on the left nipple, but the WHNP has difficulty assessing effectiveness of the latch due to limitations of video conferencing. LM takes the infant off her breast often to readjust his latch. During the unlatching process, LM winces and grimaces. When the infant finishes feeding, the left nipple appears to have droplets of blood.

#### Diagnosis

The differential diagnosis includes nipple pain sensitivity, nipple eczema, nipple vasoconstriction, and infection of the nipples. The diagnosis is a cracked nipple associated with lactation (ICD-10 O92.13).

### Plan and implementation of care

Treatment includes application of lanolin and hydrocortisone cream to the affected area, and review of optimal positioning to prevent further nipple injury.<sup>5</sup> A referral to a local community-based lactation consultant is placed.

### Four weeks postpartum

LM returns to the clinic with left nipple and left breast pain for the last 48 hours. Over the past 24 hours, she has been experiencing body aches and chills. The pain has spread beyond the nipple and now affects the entire left breast, which is swollen and hard. LM rates her pain as 8/10 when attempting to feed and 5/10 between feeds.

#### **Health history**

Over the past 3 weeks, LM's nipples have become more excoriated and are bleeding despite using the lactation consultant's treatment plan for cracked, sore nipples. LM was ensuring a deeper latch, massaging her breasts while feeding, pumping after breastfeeding, and applying drops of breast milk on her nipples and a cold gel pad to her breasts for 15 minutes after feeds. She has continued to include malunggay leaves in her diet and has added fenugreek supplements to help increase her milk production.<sup>6–9</sup>

Due to the continual pain when breastfeeding or pumping, LM admits she had been mostly feeding on the right breast. When she pumps both breasts, she can only produce half the milk volume from the left breast compared to the right. LM states the pain is "unbearable" when attempting to feed on the left breast. She has completely weaned off the oxycodone but has continued to take acetaminophen and ibuprofen for nipple and breast pain.

The constant pain has started to affect her emotions, concentration, and activities of daily living. Her pain has made her feel "stressed and exhausted." She is "frustrated and sad" that breastfeeding has been difficult. She also shares that her mother has warned her of a superstition that was passed on from her own mother, "Huwag magpadede ng masama ng loob, dahil madedede ni baby ang sama ng loob." (Do not breastfeed when you experience negative emotions, because you will pass on the negative emotions to your baby through the breastmilk.) LM is conflicted about whether or not to continue breastfeeding. LM's score on the Edinburgh Postnatal Depression Scale (EPDS) is 9 without

any suicidal ideation. A score of 12 or above indicates high possibility of postpartum depression. Because her score falls between 5 and 9, the WHNP plans to re-evaluate her in 2 to 4 weeks.<sup>10</sup>

#### Physical exam

LM's vital signs are: temperature 101.6°F, blood pressure 91/44 mm Hg, pulse 116, and respiratory rate 16. The left breast is firm, erythematous, swollen, and displays shininess and hyperpigmentation in the area surrounding the nipple and areola. Her left nipple appears flat, and the right is everted. LM appears fatigued and visibly shivering. There is moderate fundal and suprapubic tenderness on palpation. The low transverse incision is well-approximated and healing.

#### Diagnosis

Differential diagnoses include severe engorgement, plugged duct, galactocele, breast abscess, inflammatory breast cancer, endometritis, Cesarean section incision infection, and postpartum sepsis. The diagnosis is nonpurulent mastitis associated with lactation (ICD-10 code: O91.23) and endometritis following delivery (ICD-10 code: O86.12).

### Plan and implementation of care

Mastitis can be managed outpatient with oral antibiotics, but given LM's fever, suprapubic pain, and postsurgical status, a hospital admission for intravenous antibiotics to manage her endometritis is warranted.<sup>11,12</sup> Intravenous gentamicin (1.5 mg/kg) every 8 hours and clindamycin (900 mg) every 8 hours are initiated. The preferred treatment for lactational mastitis is dicloxacillin because the transfer into human breast milk is low and is not expected to cause adverse reactions in breastfeeding infants.<sup>13,14</sup> However, due to the national shortage of dicloxacillin, an infectious disease specialist is

consulted for alternative antibiotics. A course of oral cephalexin (500 mg), 4 times a day for 7 days is recommended.<sup>15</sup> LM's white blood cell count was initially over 20 imes109/L. Her urine culture was negative, blood cultures were negative x 2, and the coagulation profile remained normal throughout her hospitalization. An abdominal ultrasound with Doppler studies was negative. On the second day of hospitalization, LM defervesces to 98.9°F and her suprapubic pain and fundal tenderness have improved. LM's left breast is less erythematous, and pain has improved. After being afebrile for 48 hours with significant improvement of symptoms, a plan for discharge is initiated. The patient is advised to report if symptoms do not improve or if they worsen. She is scheduled for a follow-up visit in 1 week, which she misses because her newborn had a pediatric appointment on the same day.

#### Eight weeks postpartum

At 8 weeks postpartum, LM calls the clinic because of concerns that the mastitis has not fully cleared. She endorses having a temperature of 101.9°F, pain in the left breast that feels like "shards of glass," and an area that feels like it is filled with fluid. She rates her pain as 9/10 while breastfeeding. LM has stopped taking herbal supplements. She states, "My lola (grandmother) is upset that I don't want to drink her malunggay tea to keep my milk production up. She also wants me to continue breastfeeding through the pain. It hurts a lot to latch my baby." Given her hospital admission for mastitis and endometritis a few weeks ago, LM is scheduled for an appointment on the same day.

#### Health history

LM presents to the clinic and states that despite completing the full

### Figure. Abscess of the left breast



course of antibiotics from her previous hospital admission, the pain from the mastitis improved only for a few days after discharge. She endorses that the current breast pain is in the same location as her prior infection, but the pain has worsened. LM states breastfeeding and pumping has been extremely painful and she feels a sharp-shooting sensation. She has started to wean on the affected side because of the pain. She has gone back to work and has not been able to find the time to pump regularly. Over the last few days, she has been taking ibuprofen (800 mg) every 8 hours and acetaminophen (1 g) every 6 hours with only minimal relief.

#### **Physical exam**

LM's vital signs are: temperature 101.8°F, blood pressure 102/68 mm Hg, respirations 18, and pulse 108 beats per minute. LM's breast exam reveals a tender, erythematous 5-cm fluctuant mass at 10 o'clock on the left breast (*Figure*). Exam of the right breast is noted to be within normal limits. The left axillary nodes are mildly swollen. LM's Cesarean section incision is well healed. The uterine fundus is no longer palpable.

#### Diagnosis

The differential diagnosis includes inadequate treatment of previous mastitis, recurrence of a new mastitis infection, breast abscess, breast mass, and cellulitis. The diagnosis is an abscess of the breast and nipple (ICD-10 code: N61.1). Due to ineffective emptying of her milk because of pain associated with breastfeeding, LM's mastitis did not completely resolve despite receiving antibiotics. LM's breast infection has developed into an abscess.

### Plan and implementation of care

In the case of a breast abscess, prompt treatment is necessary because the infection can continue to progress quickly. The area of the abscess should be demarcated to visualize the baseline and the possible growth of the infected area. As LM's vital signs are overall stable, except for a fever and mild tachycardia during the office visit, the WHNP determines the abscess can be managed outpatient.<sup>16</sup> Because the WHNP suspects the abscess has affected the surrounding tissues, an ultrasound of the left breast is ordered. The radiologist confirms a breast abscess measuring 4 cm with deep breast tissue involvement. Abscesses smaller than 3 cm with overlying, normal-appearing skin can be drained by needle point aspiration. As LM's abscess is larger, she is referred to a breast surgeon for surgical incision and drainage of the abscess. The breast surgeon determines the cavity is small enough and does not need wound packing. LM is restarted on cephalexin (500 mg) orally 4 times a day for 7 days. Aspirated fluid and pus from the breast abscess are sent to the laboratory for culture and antibiotic sensitivity. If the culture shows beta-lactam hypersensitivity, the antibiotic regimen would be changed to clindamycin (300–450 mg) orally 3 times a day. She reports that her overall mood has improved, especially after the incision, and drainage has resulted in a significant reduction in pain. LM scores 4 on the EPDS, indicat-

ing postpartum depression is not likely. LM continues to breastfeed from the unaffected breast during the recovery process despite her mother's protest to guit breastfeeding completely. LM's mother states, "Hindi dapat magdede pag may impeksyon. Bawal yan. Bigyan na lang ng am." (Don't breastfeed while you have an infection. That's not allowed. Let's just give the baby rice water). "Am" or rice water, the product of boiling rice, is traditionally used by many Filipinos, especially those living in rural areas, as a cheap and easy alternative to breast milk and formula.17

### Cultural values, beliefs, and practices

Throughout this case, LM provides some insight into Filipino cultural values, beliefs, and practices that can shape not only a normal breastfeeding experience but also an experience with complications. Filipino tradition is as diverse as the number of islands in the Philippines. Approaches and attitudes toward health in different regions of the Philippines reflect the rich multicultural heritage that has been deeply influenced by indigenous Filipino healing practices and four centuries of being colonized by Spain, Japan, and the United States. These practices are part of the Filipino American immigrant's beliefs and identity and to varying extents may be passed down to future generations. Understanding and attention to cultural influences is important to promote a positive and supportive environment for all patients.

#### Implications for nurse practitioners

Nurse practitioners who care for postpartum lactating patients with nipple and breast pain must be able to recognize emerging complications in a timely manner. Although nipple excoriation may be treated as an iso-

## **Box.** Breastfeeding resources for healthcare professionals

Academy of Breastfeeding Medicine protocols for health care professionals<sup>A</sup>

American College of Obstetricians and Gynecologists breastfeeding challenges<sup>B</sup>

lated incident, the breakdown of this tissue may serve as an entry point of infection. Improper management of nipple abrasion may lead to further complications such as mastitis and breast abscess. History and physical exam are cornerstones of properly diagnosing and managing nipple and breast pain and infection. An interdisciplinary team approach with a collaborative obstetrician, radiologist, breast specialist, and breast surgeon will determine the best treatment plan to manage the patient's nipple and breast complications.<sup>18</sup>

Most breast infections are isolated and have positive long-term outcomes. However, if not treated and managed appropriately, recurrent infection can cause continued pain, tissue scarring, breast asymmetry, and a poor quality of life. An infection lasting more than 5 weeks that is not responding to treatment protocols should be further evaluated to rule out malignancy.<sup>11,18</sup>

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#### Web resources

A. bfmed.org/protocols

B. acog.org/clinical/clinical-guidance/committee-opinion/articles/2021/02/breastfeeding-challenges#:~:text=Based%20on%20 the%20benefits%20of,the%20woman%20 and%20her%20infant.