

Infant & Toddler Feeding Case Files

嬰幼餵哺檔案

 Baby Friendly Hospital Initiative Hong Kong Association

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An Effective, Efficient and Painless Approach to the Treatment of Blocked Milk Ducts

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Case History



Mrs. Wong, a healthy first-time mother, gave birth to her full-term baby boy by spontaneous vaginal delivery 2 months before this consultation. She had a history of blocked milk ducts on her left breast a month before when she sought help from a “lactation specialist” (催乳師). The blockage was resolved after breast massage and forceful compression which caused her much pain. She came to my Maternal and Child Health Centre (MCHC) today requesting for breast compression because of a recurrent blockage of ducts in her left breast on which her baby was reluctant to suckle.

My Journey as a Lactation Nurse

Blockage of milk ducts is a painful condition commonly affecting breastfeeding mothers. The localized milk stasis presents as one or more tender breast lump(s), often accompanied by decreased milk supply. Early resolution of the blockage does not only prevent mastitis, but also helps mothers to build their confidence in sustaining breastfeeding.

I have worked to promote and support breastfeeding by providing lactating mothers with counselling and skills coaching in MCHCs for about 20 years. For many years, my practice in managing blocked ducts was to offer breast massage +/- compression after ensuring good positioning and attachment, and encourage mothers to have frequent milk removal. It was shown to be effective if sufficient time, such as a session of 60 or more minutes, was available for assessment and skills coaching in manipulating the blocked ducts.

The effect was better if the lactating mother practiced direct breastfeeding. However, the mental and physical stress arising from having limited time in manipulating the blockage often poses a great challenge to health care workers in the busy setting of an MCHC. Besides, the inevitable and intense pain from which lactating mothers suffer during breast compression is often a trigger for stopping breastfeeding as they are frightened by the possible recurrence of the traumatic experience. Therefore, an effective, efficient and pain-free management approach to blocked ducts is crucial in facilitating sustained breastfeeding.

In the recent 4-5 years, the Breastfeeding Working Group of the Family Health Service of Department of Health (FHS, DH) has been vigorously recommending augmentation of the oxytocin reflex to improve milk flow as the mainstay of managing blocked ducts. The traditional forceful breast compression is discouraged due to its potential trauma to the mother both physically and psychologically. However, practices among nurses vary. Some lactation nurses continue to use the traditional compression method because of their past successful experiences. Some resume breast compression because of unsatisfactory results after trialing the new method. Some clients, like in this case, return to the MCHC to specifically request for breast compression.

In the recent few years, I have totally stopped using forceful compression to alleviate blockage of milk ducts. After many longitudinal follow-ups by myself, I find the use of **augmentation of oxytocin reflex in treating blocked ducts effective and efficient**. Now, it usually takes me 25-30 minutes to complete the assessment and skills coaching for mothers with blocked ducts. I infer from my past experiences that the key to successful treatment is a good understanding of the underlying physiological mechanism of oxytocin reflex as well as effective communication with the mother. Taking Mrs. Wong's condition as an illustration, I would like to walk through the management of a typical case of blocked ducts and share the key points I have learnt over the years.

1. Building a good rapport with the client while exploring the feeding history

Instead of asking directly about the blockage problem, I start off with **open-ended questions** on the feeding practice. Being encouraged to talk freely, the mother usually offers a lot of information on her feeding pattern, her difficulties and concerns about the blocked ducts. This would not only help elicit a comprehensive feeding history but also facilitate her active participation in subsequent discussions.

Mrs. Wong breastfed her baby directly on one side in each feed, 6-7 times a day. The first feed started at 6am and the last at 10pm. As she wanted him to sleep through the night, she gave him a bottle of formula milk at midnight, hoping that he would not wake up by hunger. She pumped once a day around 4am.

2. Finding out the cause

Exploring the likely causes for the blockage, especially any **unusual milk removal pattern** in the few days prior to the blockage, is important in preventing recurrence.

Mrs. Wong's feeding history is apparently normal, which is not uncommon among mothers with blocked ducts. She recalled that the day before, she had been very tired and skipped her pumping normally done in the early morning. By the time she woke up to feed her baby, the interval from the last milk removal had already been more than 8 hours.

3. Exploring her self-help action

To understand what and how a mother had done to help herself is important to inform the subsequent management. She may lose confidence especially in strategies that she had attempted but failed. Her experience and perception often affect her compliance.

Like most affected mothers, Mrs. Wong tried hot pad and forcefully compressed the blocked ducts by herself. She believed that mechanical compression was the only solution and she accepted the pain being inevitable in the process.

4. Observing how the baby feeds on the breast

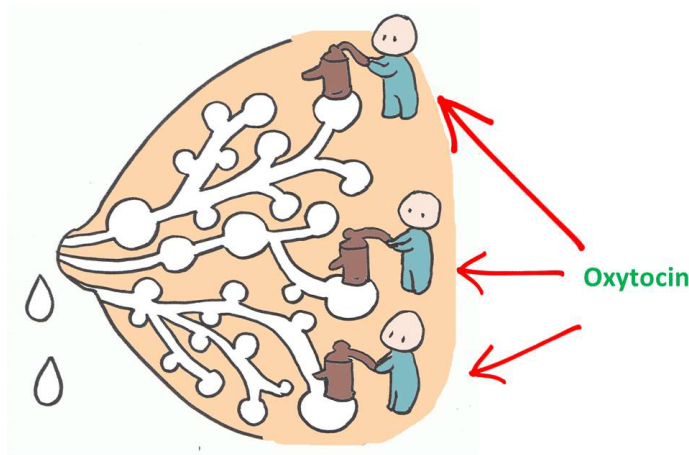
Before examining the breast lump, observing how the mother breastfeeds her baby is essential. **Observing a feed should be routinely done even the mother has no concern about attachment** because sub-optimal attachment reduces the effectiveness of any effort to resolve a blockage and increases the risk of recurrence, especially among mothers who breastfeed directly.

Mrs. Wong and her baby showed good positioning and attachment with satisfactory milk flow when feeding on the left breast. However, the baby was reluctant to suckle on the affected side. I became certain that the root cause was delayed milk removal. With the mother's consent, I examined her breast lump which was a firm and mildly tender mass of 1cm x 2cm at 9 o'clock position on the left breast. The overlying skin appeared normal.

5. Summarizing the findings

Before giving advice, it is important to summarize the salient information collected through the interview and highlight this to the mother. It helps reassure the mother that her situation is well understood and, at the same time, **gain her trust**.

6. Explaining the physiology of milk flow



Source of Picture: Family Health Service,
Department of Health

To build the mother's confidence in this "new" approach to treatment and to correct any of her misconceptions, it is essential to explain the physiology of milk release through the **oxytocin reflex** (also named "let-down reflex" 噴奶反射) in easily understandable terms with diagrams. I usually illustrate this with the booklet "Love, Starts from Breastfeeding", produced by FHS, DH. The key points include:

- In the presence of a hormone called prolactin, milk is produced by the cells lining the small milk sacs which store the milk.
- Surrounding the milk sacs and ducts, there are muscle cells which contract and eject breastmilk from these small milk sacs into the ducts when stimulated by another hormone called oxytocin. It also widens and shortens the milk ducts, facilitating milk drainage. This is known as the "let-down" reflex which is innate, safe and pain-free.
- The oxytocin reflex simulates an "internal pump", facilitating milk removal.
- Weak or absence of oxytocin reflex limits the drainage of milk, resulting in blocked ducts.
- Forceful mechanical compression can potentially traumatize the breast tissue and inhibit the reflex.

When mothers understand how oxytocin reflex works, many become willing and confident to participate and follow the advice.

7. Augmenting the oxytocin reflex

Oxytocin reflex is triggered when a mother feels good, relaxed, comfortable or loved, while pain is a potent inhibitor. Therefore, measures that can relieve maternal pain or bring about good feelings are helpful. These include analgesics, skin-to-skin contact, gentle breast massage, warm compress (no more than a few minutes), back massage, warm shower or a warm soothing drink, etc.

Among all these, **pain relief and skin-to-skin contact are the two most effective strategies** which I recommend routinely. Pain relief in the form of Ibuprofen or Paracetamol is the first line treatment. They

most lactating mothers and acts quickly and effectively to alleviate the inhibition of oxytocin reflex. Besides, the anti-inflammatory action is helpful in improving the commonly associated inflammation.

Skin-to-skin contact is another highly effective strategy but has not been strongly recommended by healthcare workers. This is easy and convenient to carry out. It does not require much preparation or help from others. As long as the mother and baby are staying together, opening up front buttons of their clothing to allow the dyad a chest-to-chest contact is good enough. This promotes loving relationship between the mother and baby.



While I mention different ways of augmenting the oxytocin reflex, I also warn the mother not to exhaust herself by carrying out excessive number of procedures as this may be counterproductive due to increased stress or exhaustion. Finally, I would correct the mother's misconceptions, if any.

I explained to Mrs. Wong the importance of pain relief by taking Paracetamol and skin-to-skin contact with her baby during feeding. I also stressed the inhibitory effect of painful breast compression on the oxytocin reflex.

8. Further improving the milk drainage

When a mother understands the mechanism of oxytocin reflex, additional measures to improve the drainage during milk removal are advised. These include:

- **Gentle stroking** from behind the blocked duct towards the nipple during milk removal. The mother is warned that **once pain is felt, the force applied is likely too strong** and the oxytocin reflex would be suppressed. **Direct demonstration by stroking** the mother's hand is helpful for her to perceive the appropriate force applied.
- **Trying different feeding positions** in a direct breastfeeding dyad such that the baby's chin would be near the affected area to facilitate optimal milk drainage from the blockage.

After demonstrating how to do the stroking, I proceeded to teach Mrs. Wong the football hold which would be especially helpful for her blocked duct.

9. Ensuring frequent milk removal

Apart from augmenting the oxytocin reflex to improve milk drainage, **frequent milk removal is as important**. Increasing milk drainage on the affected breast by more frequent breastfeeding or pumping (about 1-2 times more frequent per day) is advised. Because of the reduced milk flow, some babies may be reluctant to suckle on the affected breast. These mothers can start with the unaffected side for a few minutes to facilitate good milk flow through the oxytocin reflex. After that, the baby is switched to suckle on the affected side.

I advised Mrs. Wong to breastfeed her baby direct throughout the day and night, and feed him 1-2 times more on the affected (left) side with a football hold. If he was reluctant to latch on the left breast, she might start on the right for a few minutes before switching him back to the left side. If still unsuccessful, she should pump to remove the milk from the left breast. I further explained to her that supplementing with formula milk would reduce milk removal resulting in an increased risk of milk stasis. Exclusive breastfeeding not only helped to resolve but also prevent the recurrence of blocked ducts. The benefits of exclusive breastfeeding were stressed. I finally reminded her that if she decided to continue pumping as before, she should try to keep the milk removal no more than 6 hours apart.

10. Client to Summarize the Action Plan

After giving a long list of advices, asking the mother to summarize the action plan is very effective in **consolidating her understanding** and ensuring key messages have been clearly received. Finally, I would explain to the mother that the blocked ducts should resolve within 24-48 hours and a follow-up in 2 days is arranged. Letting the mother know what to expect makes her feel secure and supported.

Two days after, Mrs. Wong came back for follow-up and her blocked duct had resolved. She left the MCHC happily.

Key Message:

- Treating blocked ducts through augmentation of the oxytocin reflex is effective, efficient and pain-free.
 - Exploring the feeding history including the triggering factor(s) of the blockage and observing a breastfeed are crucial in assessment, management and prevention of recurrence.
 - Pain relief and skin-to-skin contact are the two most important measures to improve milk drainage through augmentation of the oxytocin reflex.
 - A successful outcome relies on the mother's compliance with the recommended methods. This is achieved by effective communication to gain her trust and ensure her understanding of the physiological mechanism of oxytocin reflex.
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- 加強噴奶反射以解決乳管阻塞是有效、便捷和無痛的。
 - 深入探究餵哺歷程和引致乳管阻塞的原因以及觀察餵哺情況，對評估、處理和預防乳管阻塞十分重要。
 - 服用止痛藥及施行母嬰肌膚接觸，是透過加強噴奶反射來改善排乳的兩項最重要措施。
 - 成功解決乳管阻塞有賴媽媽的充分合作以貫徹執行建議的方法。而合作是建基於有效的溝通，以獲取媽媽的信任，並讓她明白噴奶反射的原理。

References:

1. World Health Organization, UNICEF. Baby-Friendly Hospital Initiative: Revised, Updated and Expanded for Integrated Care. Section 3: Breastfeeding promotion and support in a baby-friendly hospital, a 20-hour course for maternity staff 2009.
2. Mannel R, Martens P, Walker M. Core curriculum for lactation consultant practice, 3rd ed. USA: Jones & Bartlett Learning 2013.

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