

Management of hyperlactation syndrome by full drainage and block feeding methods

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ABSTRACT

Over and underproduction of milk is the most common problem for lactating mothers in worldwide. Hyperlactation often unrecognized problem that can lead to array of distress symptoms for both mother and baby. There is lacuna of literature on hyperlactation syndrome in Asian region; this case reports present the management and outcome maternal hyperlactation syndrome.

Key words: Block feeding; hyperlactation; management; milk production.

Introduction

Breast milk production is an inborn ability of a mother, and it provides an optimal start to an individual's nutritional life.^[1,2] However, over or underproduction of milk is always generate problems for both mother and infants. Symptoms such as colic, milk protein allergies, gastroesophageal reflux, and unusually rapid or slow growth are common in infants. While tender leaking breasts, sore-infected nipples, plugged ducts, and mastitis are frequent in mothers.^[2,3] Methods to treat undersupply of milk is well referenced in the literature; however, hyperlactation, is a frequent yet often unrecognized problem in lactating mothers. We report a case on mother and child hyperlactation syndrome and its management.

Case Report

Mrs. J is a 32-year-old working woman with two children. Her second child is 5-day-old newborn. She had experienced oversupply syndrome on the postpartum period of her first baby. The gynecologist advised to hand-express milk after

feeding and stretch the feeding intervals; unfortunately, the approach did not work for her and end up with acute mastitis at 6 months of postpartum.

Ten years later, Mrs. J was delivered a baby boy, in the first 3 days of her postpartum; she was with normal milk supply. On the 5th day of birth of the newborn, she visited to the gynecology department with the painful breast. On examination, her breast appears to be swell up, hard, shiny, firm, and warm. There are large lumps on touch and nipples were flattened. She has a slight fever with somewhat swollen and tender lymph nodes in her armpits. She was prescribed with Injection Oxytocin 51 IU/IM stat and advised to full drainage of milk within 45 min using the breast pump. The patient was also advise to take tablet Cabergoline 0.25 mg one in the night and continued to feed the baby.

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Unfortunately, after 15 days, the infant developed unusual vomiting, abnormal arching, irritability during feeding, and persistent cough. Based on irregular breath sounds and abnormal chest X-ray finding, the infant was diagnosed as gastroesophagus reflux disease. Advised head end elevation 30°, Amoxicillin 50 mg twice daily for 5 days, domperidone 5 mg BD for 3 days, and then SOS.

Mrs. J reported very hard and full breast with pain. Breast examination was not easy, as each handling of the breast cause milk spurt. She informed with full drainage and block feeding technique. Using breast pump, she expresses both breasts completely (200 ml from the left breast and 250 ml from the right breast). She feeds within the 3 h block calendar that was set for the newborn and it fit well. Her breasts started filling again after 12 h, and she repeated expressing 24 h after the initial expression. In the course of the following week, Mrs. J had express milk 2 times after 48 and 120 h. Block feeding continued as started. At follow-up after 1 month, Mrs. J reported no more signs of overproduction.

Discussion

Breast milk oversupply is a well-known but poorly researched aspect of lactation and is generally caused by either breastfeeding mismanagement, hyperprolactinemia, or a congenital predisposition.^[1,2] If the milk production is rapid, it will exceed the storing capacity of the alveoli and lead to overdistention of the alveoli. As a result, milk-secreting cells become flattened, drawn out, and may rupture.^[4,5] In addition, dissented alveoli may occlude the capillary blood circulation and decrease the cellular activity may lead to edema. Obstruction of lymphatic drainage of the breasts, stagnating the system that rid the breasts of toxins, bacteria, and cast-off cell parts, thereby predisposing the breast to mastitis.^[6,7]

Interventions available for the management of hyperlactation are anecdotal and not well studied. Most interventions aimed to interactions of prolactin receptors and the feedback inhibitor of lactation, retention of milk within the breast, thereby decreases production.^[4,8,9] Tight breast support, ice packs, sage tea, and cabbage leaf are the various natural methods used for lactation suppression.^[4,9,10] In our patients, natural methods are not shown any effects. Hence, we have started with pharmacological interventions. Oxytocin is an essential hormone for lactation, but its exogenous administration for the treatment of breast engorgement is not clearly understood.^[11,12] The possible reason may be “let-down reflex.” Oxytocin makes the myoepithelial cells around the alveoli to contract, which makes the milk collected in the alveoli to flow along and fill the ducts, that lead to fine

streams of milk ejection. Increase in milk-duct diameter was observed in some other studies.^[11-13]

Prolactin-lowering efficacy of cabergoline was well demonstrated in hyperprolactinemic women. It is synthetic ergoline with high specificity and affinity for dopamine D2 receptors (dopamine agonist). Its potent and long-acting inhibition of prolactin secretion leads to the suppression of lactation.^[13,14]

Complete drainage and block feedings are recommended, the mother nurses from a single breast for a block of time (3 h). She then alternates breasts for successive blocks. In this way, milk accumulates in the unused breast and should decrease milk supply. It is reported that the complete drainage of both breasts before beginning the block feedings reduces the excess milk supply, and thereby reduces the mother’s engorgement and the infant’s difficulties feeding. Block feeding in women with oversupply can eventually lead to low milk production because the breasts are not getting enough stimulation.^[5]

Conclusion

Full drainage and block feeding are suitable, user-friendly methods for regularize milk production. Further study is required to understand the reasons why some women will easily produce much more milk than needed and some it is so hard to regulate milk production to meet the needs of their children.

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Conflicts of interest

There are no conflicts of interest.

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