

## A case report of successful relactation

Burcu Kayhan-Tetik<sup>1</sup>, Aylin Baydar-Artantaş<sup>2</sup>, Gamze Bozcuk-Güzeldemirci<sup>3</sup>, Yusuf Üstü<sup>4</sup>, Gonca Yılmaz<sup>5</sup>

<sup>1</sup>Family Medicine, Kalecik State Hospital, <sup>2</sup>Clinics of Family Medicine, Atatürk Research and Training Hospital, <sup>3</sup>Pediatric Dentistry, Atatürk Research and Training Hospital, <sup>4</sup>Department of Family Medicine, Yıldırım Beyazıt University Faculty of Medicine, and <sup>5</sup>Department of Pediatrics, Dr. Sami Ulus Maternity and Children's Hospital, Ankara, Turkey. E-mail: drburcukayhan@hotmail.com

**SUMMARY:** Kayhan-Tetik B, Baydar-Artantaş A, Bozcuk-Güzeldemirci G, Üstü Y, Yılmaz G. A case report of successful relactation. Turk J Pediatr 2013, 55: 641-644.

Exclusive breastfeeding is recommended from birth until the first six months and then with complementary feeding up to age two. In our country, only 41.6% of infants are exclusively breastfed during the first six months, and the average duration of breastfeeding is 16 months.

The term 'relactation' is used for the resumption of breastfeeding in infants who were not breastfed before or who quit suckling due to an illness of the mother or infant, breast problems, rejection of suckling by the infant, insufficient milk production, the mother's change of mind about breastfeeding, or adoption.

Relactation is a laborious process that requires motivation and trained personnel. In our case, the process of achieving successful relactation in an eight-week-old infant who had not been breastfed before is described. The infant's young age and mother's strong motivation led to the success in relactation in this case.

*Key words:* breastfeeding, relactation.

From prehistoric times to today, breast-milk has remained the most important nutrient.

It is emphasized in the oldest and most important medical resource, Papyrus of Ebers (1550 BC, ancient Egypt), that the only food to be used for feeding the baby is breast-milk and that the baby should receive breast-milk until the age of three<sup>1</sup>. Breast-milk provides 100% of a baby's need in the first six months, 50% from the 6<sup>th</sup>-12<sup>th</sup> months and 30% from the 12<sup>th</sup> month onward<sup>2</sup>. The most important way to prevent infant deaths within the first four or six months is through breastfeeding<sup>3</sup>.

It is well known that breastfeeding holds many advantages for the mother and the infant. In addition to the benefits for the mother in terms of medical and psychological health, breastfeeding has unquestionable positive effects for the baby in terms of reducing acute and chronic disease, improving the immune system, providing psychological benefits, and supporting spiritual, physical, and intellectual

as well as dentoalveolar development<sup>1</sup>.

The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) recommend exclusive breastfeeding for the first six months of an infant's life and continued breastfeeding with adequate complementary food for up to two years of age<sup>4</sup>. The same recommendation is accepted by the Ministry of Health in our country. The "baby-friendly hospital" implementation of the Ministry of Health, together with printed brochure booklets and training sessions about successful breastfeeding techniques, has gained momentum, especially in recent years. However, according to data supplied by the 2008 Turkey Demographic Health Survey, only 41.6% of the infants in our country are exclusively breastfed during the first six months, and the average duration of breastfeeding is 16 months<sup>5</sup>.

The receipt by newborn babies of breast-milk beginning from birth and resumption of breastfeeding for infants who have never

been breastfed or who received interrupted breastfeeding for any reason should be encouraged in order to increase this ratio. The latter situation is called 'relactation'. Relactation can even be re-established in situations such as following illnesses in the mother and/or infant, breast problems, rejection of suckling by the infant, insufficient milk production, the mother's change of mind about breastfeeding, and adoption.

Breastfeeding supplementers and 'drop and drip' are the two main methods used for relactation. In the breastfeeding supplementer method, the end of a fine plastic tube is taped near the nipple towards the infant's mouth, the other end of the tube is placed into a cup of milk, so the infant is provided with a steady flow of supplementary feed while he or she suckles and stimulates the breast and nipple. In the 'drop and drip' technique, milk is dripped from a dropper directly onto the breast, while the infant is suckling<sup>6</sup>. In both methods, it is aimed to start and increase milk production by the infant's active suckling and stimulation of the breasts.

In this report, we present a case of relactation achieved by the breastfeeding supplementer method using a syringe with piston instead of a cup with nearly the same mechanism as a cup.

### Case Report

An eight-week-old male infant was brought to the emergency department with the complaints of restlessness, continuous crying, diarrhea, and vomiting 10-15 times a day. He was hospitalized after being diagnosed as acute gastroenteritis and second-degree dehydration according to the physical examination and laboratory findings.

It was learned that the baby was delivered spontaneously in the 36<sup>th</sup> week from a 26-year-old mother with a diagnosis of intrauterine oligohydramnios. He weighed 3000 g (10<sup>th</sup>-25<sup>th</sup> percentile) with a 9-10 Apgar score. He was hospitalized with a neonatal pneumonia diagnosis and was then discharged from the hospital on the 26<sup>th</sup> day postnatally.

On the second day of the ongoing treatment, the baby's condition improved and intravenous fluid supply was terminated; meanwhile, feeding with a baby bottle containing artificial milk was continued. The baby was bottle-fed



Fig. 1. Image of the supplementer method used to achieve relactation in this mother-infant dyad.

thereafter and had never been given a pacifier. Our interviews with the mother revealed her deep sadness for not having been able to breastfeed her child soon after delivery, so we suggested that she could be helped to begin breastfeeding again if she was determined to do so. The relactation process was then started on the fourth day of hospitalization (postpartum 8<sup>th</sup> week, 4<sup>th</sup> day) with the mother's strong desire and determination and our willingness to support her. The baby weighed 3900 g (3<sup>rd</sup> percentile) at that time.

A detailed relactation program was discussed. First, a team was formed from among the trained nursing staff to provide strong motivation and breast massage to create the oxytocin reflex. The baby's daily milk need was calculated as 675 ml/day from 150 ml/kg. The breastfeeding supplementer technique was used to aid relactation<sup>6</sup>. An additional hole was formed at the end of the nasogastric tube and placed on the mother's chest, and the end of the tube was stabilized with a piece of tape near the nipple so that the infant could suckle the breast and the tube at the same time (Fig. 1). The calculated daily milk intake was given in approximately eight feedings by slowly pressing the piston of the connected 10 ml syringe with the aid of trained personnel. Meanwhile, with the mother holding the baby in the breastfeeding position and the baby grasping the breast, a sensual contact between the mother and baby was provided concomitantly. The milk was pushed slowly as long as the baby kept nursing. This procedure

was repeated every time the baby was willing and every 3-4 hours at night for a total of six days, and 30 minutes was scheduled for each nursing period. The baby's weight gain and urine output were followed daily. The mother's nipples were evaluated daily for signs of possible nipple cracks or mastitis, and she was constantly motivated and supported for self-confidence. A few drops of milk were secreted by day three (postpartum 9<sup>th</sup> week), and the amount of secretion increased daily with regular breastfeeding. The daily amount of artificial milk was reduced 30 ml every day starting from the third day of the relactation process. As a result of the baby's active suckling habit, normal urinary and fecal output and absence of weight loss, the 495 ml of artificial milk that was to be given on the 6<sup>th</sup> day of the relactation process was withheld, and exclusive breastfeeding was achieved.

The baby's weight was 4550 g (3<sup>rd</sup> percentile) on the day 8 of relactation, and the baby was discharged with the proposal of exclusive breastfeeding at home in view of the successful relactation procedure.

At the first-week follow-up, the baby's weight was recorded as 4680 g (3<sup>rd</sup> percentile), and it was learned that he was exclusively breastfed at home. His weight was consistent with month, he was active and cooperative, and there were no pathological findings during the physical examination. The mother was happy and self-confident at being able to breastfeed her child. She was advised to bring her baby for routine check-ups and to maintain exclusive breastfeeding for the first six months. The mother informed us later that the baby had been breastfed only for the first four months, and then breast-milk and artificial milk had been given alternately.

## Discussion

In our case, breast-milk secretion was achieved on the third day of the relactation process; the breastfeeding supplementer method was stopped by day 8, and exclusive breastfeeding was achieved. In a case report of a 14-week-old baby who had not received any breast-milk, presented by Agarwal and Jain<sup>7</sup>, milk secretion was achieved on the sixth day of relactation, and the process was replaced by breastfeeding by day 11. The early secretion of breast-milk

in our case could be explained by the infant's earlier age and the mother's strong motivation.

The case report of Muresan<sup>8</sup> presents an infant weaned at postpartum day 10 because of his mother's illness and the medications being used. The baby was breastfed by his mother's sister, so he had no problem with the suckling reflex. Although relactation began at postpartum 9 weeks, successful breastfeeding was achieved in one month, and lactagogues were used in this period.

The completion of relactation in a relatively short time in our case despite the infant's having not been breastfed before is surprising. The most important factors playing a role in this success were the mother's enthusiasm to succeed and the intense and effective consultancy about breastfeeding. Consultants who were certificated by the Ministry of Health motivated the mother throughout the relactation process.

It is known that lactagogues are not prescribed alone. They can be used only if relactation cannot be achieved within two weeks despite effective counseling and supplementary methods<sup>6</sup>. Due to the early secretion of breast-milk, no lactagogues/galactagogues were started in our case.

In the study of Seema et al.<sup>3</sup>, carried out on 50 mothers with partial or complete lactation failure, relactation attempt was successful in 98%, with complete relactation in 92% and only partial relactation in 6% of the mothers. In the literature, success rates of relactation varying from 50-75% have been reported by different authors<sup>3</sup>. From this point of view, our case is a good example of a complete lactation failure with a successful conclusion of complete relactation.

The noteworthy aspects of our case are 1) that the mother was uniparous and thus had never breastfed before and 2) the relatively short period of time for achieving successful relactation for this infant-mother dyad when compared to the literature.

## Acknowledgement

We thank Seval Öztürk for her nursing support of the mother and her baby during our team study.

## REFERENCES

1. Samur G. Breast Milk. Ankara: Klasmat Press; 2008: 9 (In Turkish).
2. Republic of Turkey, Ministry of Health, Breast Milk and Breastfeeding Counseling Booklet. Ankara: General Directorate of Mother and Child Health and Family Planning Press; 2001: 8-10 (In Turkish).
3. Seema MD, Patwari AK, Satyanarayana L. An effective intervention to promote exclusive breastfeeding. *J Trop Pediatr* 1997; 43: 213-216.
4. World Health Organization. Infant and young child feeding - model chapter for textbooks for medical students and allied health professionals. Geneva: WHO Press; 2009: 1-2.
5. Yiğit EK, Tezcan S, Tunçkanat H. Childhood and maternal nutrition. In: Hacettepe University Institute of Population Studies, Turkey Demographic and Health Survey, 2008. Hacettepe University Institute of Population Studies, Ministry of Health General Directorate of Mother and Child Health and Family Planning, State Planning Organization and TÜBİTAK. Ankara, Turkey: 2009; 171-177 (In Turkish).
6. World Health Organization. Relactation: A Review of Experience and Recommendations for Practice. Geneva: WHO Press; 1998: 18-20, 24-27.
7. Agarwal A, Jain A. Early successful relactation in a case of prolonged lactation failure. *Ind J Pediatr* 2010; 77: 214-215.
8. Muresan M. Successful relactation - a case history. *Breastfeed Med* 2011; 6: 233-239.