

MATERNAL DISEASES AND BREAST-FEEDING

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ABSTRACT

Mother's milk is the most appropriate food for infants. There is no other food to replace it. No other initiative to improve the mother and child health level can prove to be as helpful as the encouragement of breast-feeding. It is extremely important for every society to maintain, encourage and support the use of mother's milk and breast-feeding culture. The occasions in which breast-feeding can have drawbacks are extremely limited.

In this article, we will discuss breast-feeding in the case of various maternal diseases.

Key Words: Maternal diseases, Breast-feeding

INTRODUCTION

The only food given to a child for the first 4-6 months in his/her life should be mother's milk. Universal breast-feeding has been a stated goal of the American Academy of Pediatrics, as well as of the World Health Organization (1,2).

The occasions in which mother's milk is not given are rare. In cases of Hepatitis B carrier, tuberculosis and most of the infections that are often seen, disturbances such as mastitis there is no need to stop the breast-feeding. Stopping the

breast-feeding in such cases would be a great loss for the baby (2-4).

This article aims to provide help for the health staff dealing with mother and child health, in conditions where they would hesitate whether or not to advice mothers to stop breast-feeding in the light of the recent books and articles.

MASTITIS

Mastitis is cellulites of the connective tissue. It occurs generally in the first weeks of breast-feeding. It results from the accumulation of milk in the nipples and uncleanliness of the nipples. It arises in about one twentieth of the breast-feeding mothers. If a woman in the lactation period has tremors, soreness, fatigue and swelling, breast ache and rash, then mastitis should be considered. The agent is often staphylocochi; staphilacochus aureus. It is not important whether these microorganisms are determined in the milk, as the amount of microorganism is generally the same as the amount found in the milk of women without mastitis (1,2). Since the mastitis of the mother has no side effect on the breast-fed infant, breast-feeding should not be stopped (2,3). This also prevents mammary abscess and helps the infection heal in a short period. If breast-feeding through the infected breast is too painful, then the breast should be emptied by hand or vacuum

apparatus and the milk should continue to be given to the infant in this way. Even if there is pus in the milk (which is a very rare incident), it is not a drawback for suckling the baby (1,2). Warm compress is applied on the breast to improve the flow of the milk. It is necessary to apply antibiotic treatment in severe cases. The antibiotics used in this treatment do not harm the infant. Epidemic mastitis is generally seen in the form of hospital infections. In this case, breast-feeding should not be stopped, but the required treatment should be applied both to the mother and to the infant (1,2).

MAMMARY ABSCESS

If breast-feeding is stopped during mastitis; an abscess can develop. If an abscess is diagnosed, then no suckling should be made through the infected breast until it is treated (1,2). In this case, breast-feeding should be continued through the healthy breast. The abscessed breast should be emptied frequently and the emptied milk should not be given to the infant (4).

TUBERCULOSIS

Tuberculosis infection of the mother is dangerous for the baby. But contamination through the mother's milk is out of question. Contamination generally takes place as the result of close contact and through the respiratory tract. It is rather difficult to completely prevent this close contact. The infected mother should immediately be given treatment and made non-infective as soon as possible. If the mother has caught active tuberculosis during the pregnancy (that is if there are lung graphics findings and the bacteria is positive), and the treatment has been initiated at least one week previous to the delivery, then the newborn should be breastfed without being separated from the mother and given the appropriate doses of Isoniacid (INH). When the mother is bacteriologically negative, then even if the treatment has just begun, INH should be applied to the baby without separation from the mother. If the mother has pulmonary tuberculosis and has not been ill for two years, then she can freely breast-feed her baby (3-8).

MUMPS

Even though mumps is very rarely seen in adults, it can result in extremely painful mastitis. But breast-feeding should not be stopped. Because the baby has already caught the disease by the time the clinical symptoms are seen in the mother. And due to the antibodies in the mother's milk, infants generally do not catch the disease even if they have got the virus (4).

HERPES SIMPLEX

Herpes simplex virus has no contraindications for breast-feeding, unless there is no active lesion on the breast of the mother.

In the case of herpes simplex, personal hygiene should be given importance and precautions should be taken to prevent contamination of the infant from the hands, mouth and garments of the mother (4,9).

CYTOMEGALOVIRUS (CMV) INFECTION

Even if the baby is infected at birth, the illness does not develop. CMV (and the antibodies produced against them) may also be found in the saliva and milk of the mother, but this will not harm the baby. Thus, even if CMV infection is determined in the breast-feeding mother, it is not necessary to stop breast-feeding. Though the disease is rarely found in weaned babies who are fed with adaptive milk products, the complications of the infection are more severe in these babies due to the fact that they have not taken the antibodies necessary to overcome the disease (3,9-11).

BLEEDING AT THE NIPPLES

Especially in primiparae, nipple bleeding and bloody milk is very common during the pregnancy and at the beginning of the breast-feeding period. This situation is probably due to the increased vascularity of the breast. The blood in the milk is not contraindicant to breast-feeding (1,3).

BREAST CANCER

Women with a mass in their breasts should be examined to determine the nature of this mass. In approximately 10% of lactating women with a mass in their breasts, the growth is malignant. However, this rate can be higher in older women who are in the lactation period (1).

Unfortunately, many cases of breast cancer can not be assessed without excisional biopsy. Breast cancer indicates weaning for women in the lactation period, because, radiotherapy and chemotherapy are required. Anti-metabolic and anti-estrogen treatment is contraindicated to breast-feeding (3,12-15).

Women who have had cancer treatment in the past and healed should be encouraged to breast-feed. Women who have had breast radiation or surgery should be followed for the adequacy of their milk production (14).

DERMATOSIS

Eczema, psoriasis, seborrheic dermatitis, contact dermatitis and neuro-dermatitis can develop on the areola or breast skin. During the breast-feeding period, irritation can arise on the nipples of sensitive women and the skin around the areola. In this case, careful hygiene, a gentle wash after breast-feeding, sufficient drying and topical corticosteroids can alleviate the symptoms. Overuse of the topical steroids should be avoided and they should be gently cleaned from the nipples before breast-feeding (16).

MALARIA

Mothers with malaria infection should be treated with medication. During this treatment, trace amounts of anti-malarial drugs penetrate into the mother's milk. Though these trace amounts of drugs are not harmful for the baby, they are not sufficient to protect the baby against malaria. Thus the baby needs medication in order to be protected against the disease. The baby should continue to be fed with mother's milk (17,18).

HEPATITIS B

Hepatitis B virus can pass to babies through the milk of a mother who is actively infected with or the carrier of this virus. However, this kind of contamination is not as important as the contamination through the amniotic fluid or vaginal secretion. Because of that, it is wrong to stop breast-feeding due to this disease. In case of Hepatitis B infection, the baby should be inoculated with immunoglobulin and vaccine. The newborn should be inoculated with HBIG (0,5 ml/kg) immediately after birth, and with hepatitis vaccine just before it is taken to hospital; the hepatitis vaccine should be reapplied in the first and sixth months(4,19).

HEPATITIS C

The newborn should be given mother's milk, but since the newborn is under risk it should be given immunoglobulin within 48 hours following birth and this should be reapplied in appropriate dose at the end of the first month (20-23).

AIDS

Though the immunological, nutritional, psychosocial and contraceptive benefits of breast-feeding are well recognized, there is some evidence showing that the HIV virus can pass through the mother's milk. Various work has shown that, in a worldwide scale, 1/3 to 1/4 of the babies of HIV infected mothers are infected with this virus (4,24,25).

Although the contamination of the virus generally occurs towards the end of the pregnancy or during the delivery, it is emphasized in various studies that, in more than 1/3 of the babies, infection arises due to breast-feeding. The babies who have not caught the disease during the gestation period or delivery can be infected through mother's milk (24-27). The rate of the babies who are not infected during birth but get infected through mother's milk is estimated as 12-14%. Twenty-nine per cent of all the HIV contaminations after birth occur as the result of breast-feeding (26).

Leroy et al found out in their study that none of the children with late postnatal transmission would have been infected if breast-feeding had stopped at age 4 months, and only three would have been infected if breast-feeding had stopped at age 6 months (27). Several studies suggest that the first few weeks or months of life may be the time during which most transmission of HIV through breast-feeding occurs (28-30). Miotti et al reported on breast-feeding transmission among a cohort of HIV-exposed, breast-fed infants in Malawi (28). They found that the risk for transmission was higher within the first 6 months of life than later—approximately 0.7% per month from 1 to 5 month of age compared with 0.3% per month from 12 to 17 months of age and 0.2% per month from 18 to 24 months of age. Likewise, results from a randomized trial of breast-feeding versus infant formula in Nairobi, Kenya, indicated that, most HIV transmission occurs during the early weeks of breast-feeding. In that study, Nduati et al reported that 66% of transmission occurred within the first 6 weeks of life, 75% within the first 6 months of life, and 84% by 12 months of age (28).

Coutsoudis et al compared transmission rates in breast-feeding, mixed-fed and formula fed (never breast fed) babies born to HIV infected mothers. Results of this work showed that the risk of HIV-1 transmission in breast-fed babies with HIV infected mothers' is significantly lower than in mixed-fed, and similar to no breast-fed (29).

Connor et al came to the conclusion that it is possible to transmit HIV infection to the baby through the mother's milk (30). It is stated that, if safe, efficient and affordable food is available then it is not preferable for the HIV infected mother to breast-feed the baby. It is also stated, however, that, in developing countries, the risk of death for infants due to malnutrition and infection, when they are not breast-fed in order to prevent contamination, is higher than the risk of death due to HIV contamination. These results show that breast-feeding by HIV infected mothers is still controversial (5,24,30,31).

DISCUSSION AND CONCLUSION

Mother's milk is an enormously valuable food for the baby. The occasions in which mother's milk is

not advisable are very limited. Since the mastitis has no side effects on the breast-fed infant, breast-feeding should not be stopped (1,2). If the mother has been infected with tuberculosis, the control and necessary treatment of the mother and baby should be provided regularly and the baby should be breast-feed (3-5). If the mother is infected with mumps during the breast-feeding period, the baby should continue to be fed with mother's milk (4). Herpes simplex virus has no contraindications for breast-feeding, unless there is no active lesion on the mother's breast (9). Also mothers with cytomegalovirus infection can breast-feed their babies (10,11). Mothers with malaria infection can continue to breast-feed their babies, however the baby needs medication in order to be protected against the disease (17,18). The babies of Hepatitis B infected mothers could be breast-fed if the necessary precautions for the newborn are taken (19).

If the mother has a mammary abscess, the baby should not be breast-feed through the infected breast till the infected mother is given the necessary treatment (1,2,4). In this case, the baby should be breast-feed through the healthy breast. If the mother has been having breast cancer treatment, the baby should not be given the mother's milk during this period (1,3,12,13). Whether HIV infected mothers should suckle their babies or not is still contradictory (4,24-26,28). In general, it is not preferable to breast-feed for the HIV- infected mother when safe, efficient and affordable alternatives are present.

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