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SOAPY TASTE OF BREAST MILK: A CASE REPORT

ANNE SÜTÜNDE SABUNUMSU TAT: OLGU SUNUMU

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ABSTRACT

It is known that refusing to breastfeed is a situation which can occur for many reasons. Some studies have reported that the soapy taste of frozen milk causes refusal to breastfeed in infants. Higher levels of lipase in breast milk can cause a soapy taste after having been stored. This study focuses on a 4 months old boy who refused breast milk for a week. He was born with his twin at 31 weeks and his birthweight was 2130 grams. The weight of the baby, who was only fed with breast milk, was 6200 grams. There were no pathological findings during the physical examination and no changes in the environment or the daily routine of his family. His mother was nursing his twin sibling in the NICU and our patient was fed frozen-thawed milk. The mother noticed that her frozen-thawed milk had a soapy taste. The lipase activity in frozen breast milk was found to be 2345 U/l. The mother was advised to mix freshly expressed breast milk with the stored milk. It was discovered that the baby did not reject the breast milk. The soapy taste in breast milk should be considered when babies are intolerant to the frozen milk of mothers. More research is needed to determine the etiology of the soapy taste in breast milk which is especially associated with higher lipase activity.

Keywords: Breastmilk, frozen milk, lipase, soapy taste

ÖZET

Anne sütü reddinin birçok nedeni olduğu bilinmektedir. Dondurucuda saklanan anne sütlerinde ortaya çıkan sabunumsu tadın bebeklerde emzirmeyi redde neden olduğu ldirilmiştir. Anne sütündeki yüksek lipaz aktivitesinin bekletilmiş sütte bu duruma neden olabileceği ileri sürülmektedir. 4 aylık erkek bebeğin son bir haftadır anne sütünü reddettiği öğrenildi. İkiz eşi olarak 31 haftalık, 2130 gr doğan bebek yalnız anne sütü ile beslenmekte olup, fizik muayenede özellik saptanmadı. Annenin yenidoğan yoğun bakım ünitesinde yatan ikiz kardeşini emzirdiği, bu bebeğin ise dondurulmuş sütle beslendiği öğrenildi. Anne, dondurulmuş çözülmüş sütünün tadının sabunumsu olduğunu ifade etti. Dondurulmuş anne sütündeki lipaz düzeyi 2345 U / l olarak saptandı. Anneye dondurulmuş sütü ile sağılmış anne sütünü karıştırarak vermesi önerildi. Bu şekilde bebeğin anne sütünü reddetmediği öğrenildi. Dondurulmuş sütün reddi durumlarında anne süütünün tadının değişikliği akla gelmelidir. Yüksek lipaz aktivitesi ile ilişkili olduğu düşünülen bu durumun etiyolojisini belirlemek için daha fazla araştırmaya ihtiyaç vardır.

Anahtar Kelimeler: Anne sütü, dondorulmuş süt, lipaz, sabunumsu tat

INTRODUCTION

It is known that refusing to breastfeed is a situation which occurs for many reasons. Higher lipase activity in breast milk can cause a soapy taste after having been stored. It is claimed that some babies do not accept a soapy taste in breast milk (1).

CASE REPORT

A 4 months old boy refused breast milk for a period of a week. He was born with his twin at 31 weeks and his birthweight was 2130 grams. At the time of this study he had received only breast milk and his weight was 6240 grams. There were no pathological findings during the physical examination and no changes in the environment or the daily routine of his family. However, it was learned that while the mother was nursing his twin sibling in the NICU the baby in this study was fed frozen-thawed milk. His mother informed us that he had refused the stored milk and that as a result of the stored milk he had vomit-

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ed. The mother noticed that her frozen-thawed milk had a soapy taste. The lipase level in frozen breast milk was found to be 2345 U/l. The mother was advised to mix freshly expressed breast milk with the stored milk. The baby could easily consume this mixture of milk.

DISCUSSION

Refrigerated and frozen human milk may have an odor different from fresh milk due to lipase-mediated triglyceride breakdown, releasing fatty acids. The odor is likely to come from oxidation of these fatty acids (2-4) Although lipoprotein lipase in human milk is not significantly affected by freezing and thawing, a high level of lipase in some frozen breast milk is reported to cause a soapy taste (1). But, in a study by Lawrence, average lipase levels in sour milk samples were 793±405 U/L compared to the normal milk samples of 1848±440 U/L (5). In our patient, the lipase level in frozen milk was measured as 2345 U/L.

.Although soapy tasting milk is not harmful for babies, some babies do not want to drink frozen milk as in our case. Some methods have been reported to solve this problem. Newly expressed milk can be stored by heating the milk to a scald to inactivate the lipase and stop the process of fat digestion. Scald the milk as soon as possible after expression. Bile salt-stimulated lipase can also be destroyed by heating the milk at 62.5°C for one minute or at 72°C for up to 15 seconds (1). A study demonstrated that freezing human milk at -80°C leads to less change in smell as compared to conventional freezing at -19°C (3). Heating milk to above 40°C to deactivate lipase is not advised because this may destroy many of the immunologically active factors in human milk (6).

CONCLUSION

The soapy taste in breast milk should be taken into account when babies are reluctant to accept the frozen milk of mothers. Further research is needed to determine and eliminate the etiology of the soapy taste that has been suggested to be associated with lipase levels in breast milk.

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