

## Rusty pipe syndrome

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### Abstract

**Objective:** Rusty pipe syndrome is a physiological condition which can cause bilateral bloody discharge in lactating mothers. In this report, we aim to present a case of rusty pipe syndrome in a woman who delivered twin babies.

**Case:** A 28-year-old primigravida patient delivered twin babies prematurely with a cesarean section in our hospital. Both infants were admitted to the pediatric intensive care unit due to prematurity. The mother was milking with breast pump at the first postoperative hour. She had bilateral painless bloody milk discharge from the breasts. Examination of the breasts did not reveal any tenderness, engorgement, mass lesion, cracks or fissures. The ultrasound scan did not find any pathology such as breast mass or dilated ducts. Cytological examination of the discharge was negative for neoplasm. She was advised to continue milking by pump, and the bloody discharge resolved spontaneously 7 days and did not recur. Thereafter, the patient breastfed properly.

**Conclusion:** Rusty pipe syndrome is a benign physiologic condition despite its dramatical symptoms, therefore awareness of medical personnel dealing with lactating mothers is very important for proper management of this condition, and also to avoid unnecessary investigations and to reduce anxiety in the mothers.

**Keywords:** Rusty pipe syndrome, bloody discharge, lactating.

### Özet: Rusty pipe sendromu

**Amaç:** Rusty pipe sendromu, emziren annelerde bilateral kanlı meme başı akıntısına neden olabilen fizyolojik bir durumdur. Bu yazıda ikiz bebek doğurmuş bir hastada rusty pipe sendromu olgusunu sunmayı amaçladık.

**Olgu:** Yirmi sekiz yaşındaki 33 hafta primigravid ikiz gebe hastanemizde sezaryen ile erken doğum yaptı. Her iki bebek prematüriteye bağlı olarak yenidoğan yoğun bakım ünitesine yatırıldı. Anne ameliyat sonrası ilk saatinde pompayla süt sağmaya başladı. Göğüslerden bilateral ve ağrısız kanlı süt akıntısı olduğu görüldü. Meme muayenesinde herhangi bir hassasiyet, şişme, kitle lezyonu, çatlak veya fissür saptanmadı. Ultrasonografi sonucunda memede kitle, duktuslarda dilatasyon gibi bir patoloji görülmedi. Akıntının sitolojik incelemesinde neoplastik hücreler gözlenmedi. Anneye sütünü pompa ile sağmaya devam etmesi önerildi ve sonrasında kanlı akıntı 7 gün içinde kendiliğinden geriledi ve tekrar etmedi. Hastanın emzirmesinde bir sorun gözlenmedi.

**Sonuç:** Rusty pipe sendromu dramatik semptomlarına rağmen iyi huylu fizyolojik bir durumdur. Bu nedenle, bu durumun uygun şekilde yönetilmesi, gereksiz araştırmalardan kaçınılması ve annelerde kaygının azaltılması bakımından laktasyondaki annelerle uğraşan sağlık personelinin bilinçlendirilmesi çok önemlidir.

**Anahtar sözcükler:** Rusty pipe sendromu, kanlı akıntı, emzirme.

### Introduction

Bloody discharge from nipples during lactation can create anxiety in both mother and her doctors, but it is usually harmless and self-limited condition. Bleeding from nipples can be caused by various conditions such as cracked nipples, mastitis, trauma, ductal papilloma and physiological conditions. Rusty pipe syndrome is a benign physiological condition which can also cause bilateral bloody discharge in lactating mothers. It is

defined for those who have bloody nipple discharge during the first days of lactation at first week.<sup>[1]</sup> In this case report, we aim to present a case of rusty pipe syndrome in a woman who delivered twin babies.

### Case Report

A 28-year-old primigravida with a 33-week twin pregnancy delivered with a cesarean section in our hospital.

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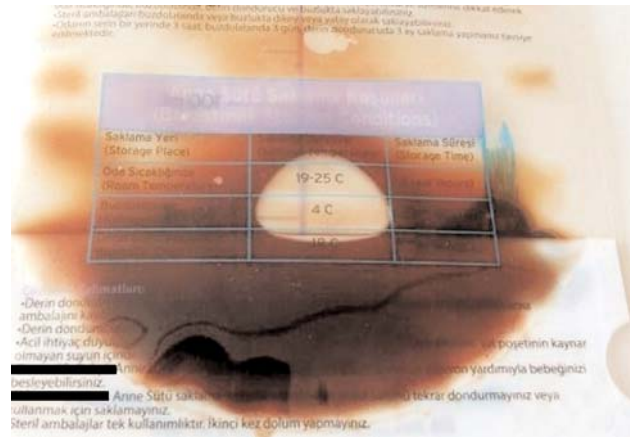
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The babies' weights were 1600 and 2060 g. Both infants were admitted to the neonatal intensive care unit due to prematurity. The mother was milking with breast pump at the first postoperative hour. She had bloody milk discharge from breasts (**Fig. 1**). The discharge was bilateral and painless. Examination of the breasts did not reveal any tenderness, engorgement, mass lesion, cracks or fissures. The ultrasound examination did not find any pathology such as breast mass or dilated ducts. Cytological examination of the discharge was negative for neoplasm. She was advised to continue milking by pump and the bloody discharge resolved spontaneously 7 days and did not recur. Breastfeeding was then started.

## Discussion

Rusty pipe syndrome is a breastfeeding condition that the color of the breast milk looks pink, orange, brown, or rust-colored, almost like the dirty water from an old rusty pipe. The rusty color usually comes from a small amount of blood that mixes with the colostrum or first breast milk. This rusty colored milk usually appears during the first few days of breastfeeding, and this condition is commonly seen at first pregnancy. Rusty pipe syndrome is a physiological condition, and it causes transient painless bloody discharge from breasts. It occurs because of the increased vascularization of rapidly developing alveoli which have a delicate network of capillaries. These capillaries get traumatized easily and result in bleeding from nipples. This delicate network may be injured during pregnancy but commonly in early lactation.<sup>[2]</sup> Breastfeeding should not be discontinued but encouraged. If baby tolerates bloody milk, breastfeeding can be continued during this period. Bloody and serous nipple discharge may also be a sign of serious illness. This discharge is usually unilateral, localized to a single duct, persistent, and spontaneous. It can be serous (clear or yellow), sanguineous (bloody), or serosanguineous (blood-tinged). The most common cause of pathologic nipple discharge is ductal papilloma.<sup>[3,4]</sup> Malignancy is found in 5 to 15 percent of cases of pathologic nipple discharge.<sup>[5]</sup> Bloody nipple discharge during pregnancy and lactation usually resolves within 3–7 days after deliv-



**Fig. 1.** Bloody milk in a storage bag.

ery, and there are no contraindications for breastfeeding. If discharge persists for more than a week, it should be evaluated further.

## Conclusion

Rusty pipe syndrome is a benign physiologic condition although its dramatical symptoms, therefore awareness of medical personnel dealing with lactating mothers is important for proper management of this condition, and also to avoid unnecessary investigations and to reduce anxiety in the mothers.

**Conflicts of Interest:** No conflicts declared.

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