



Dysphoric Milk Ejection Reflex (D-MER)

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Dysphoric Milk Ejection Reflex (D-MER) is a relatively uncommon but likely underreported phenomenon that occurs in lactating women. Unfortunately, since this problem has been only recently recognized, there is little literature or research on the subject; healthcare professionals are often unaware of its existence and many mothers fail to disclose their symptoms. D-MER is described as a wave of negative emotion associated with lactation that occurs just prior to milk let-down and has been reported during breastfeeding, pumping or spontaneously. The symptoms associated with D-MER form a spectrum of three distinct emotions: depression, anxiety and anger. The severity and duration seem to be linked, with more intense symptoms lasting longer. Women with symptoms of anxiety are more likely to feel more intense symptoms and women with anger symptoms are more likely to feel the most severe intensity. D-MER may cause some mothers to wean from breastfeeding to eliminate this response.

D-MER has a physiologic basis and is likely dopamine mediated. Normally, lactating women have elevated levels of oxytocin and prolactin. Oxytocin is responsible for the let-down of milk and prolactin is related to milk production. During a breastfeeding session, oxytocin levels raise, causing let-down, and prolactin levels rise and fall during nursing. When let-down is triggered, dopamine levels immediately decrease to allow prolactin levels to increase. This sudden decrease in dopamine likely causes deprivation to the brain in some mothers and in turn leads to the emotional responses associated with D-MER. This dysmorphic emotional response repeats itself with each of the multiple let-downs that occur when milk is being emptied from the breast by baby or by pump.

Certain activities have shown to improve D-MER symptoms due to the effect on dopamine levels; these include assuring adequate maternal rest, hydration and exercise. The use

of bupropion (Wellbutrin) has been noted to decrease symptoms, while the use of selective serotonin re-uptake inhibitors (SSRIs) has shown to have no effect on D-MER. Cigarette smoking, while not recommended for a myriad of health concerns, and the use of pseudoephedrine, also not recommended due to potent reduction in milk production, have shown similar effects in D-MER symptom reduction. Therapies that have demonstrated the potential to worsen D-MER symptoms include the use of caffeine and metoclopramide, often used to increase milk volume. Maternal dehydration and stress also appears to worsen D-MER symptoms.

While there is little research on this topic, women who report D-MER symptoms can participate in on-line forums at <http://d-mer.org/>. Healthcare professionals can also access useful information about D-MER on the website. Nursing women and their healthcare providers need to be aware of D-MER to ensure proper diagnosis and treatment and to prevent early weaning from breastfeeding.

References:

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