



Phototherapy

Revised: February 15, 2024.

Drug Levels and Effects

Summary of Use during Lactation

In general, laser therapy and phototherapy are considered acceptable during breastfeeding.[1,2] Phototherapy for psoriasis is also generally acceptable; however, nursing should be withheld for 24 hours after ingestion of an oral psoralen, such as methoxsalen.[3]

Laser therapy was used in some Russian and Austrian studies to prevent and treat lactation mastitis and nipple fissures.[4-8] However, these studies are rather old and not well controlled. Two more recent, well-controlled studies found somewhat conflicting results. In one, laser light applied to the nipple improved the pain from nipple lesions one day sooner than sham therapy.[9] In the other, a single application of laser light resulted in no difference in nipple pain during the first 24 hours after application.[10]

Some small studies have found that application of laser light to the breasts increases serum prolactin and milk production. Laser application to cesarean section wounds did not adversely affect serum prolactin.[11]

A study from China indicated that high-intensity red light (630 nm) plus antibiotics were more effective than antibiotics alone in healing mastitis and preventing recurrence.[12] Laser light has also been used as part of a 5-step procedure to treat mastitis.[13]

Effects in Breastfed Infants

Relevant published information was not found as of the revision date.

Effects on Lactation and Breastmilk

Use of low-level laser therapy to enhance healing of the surgical incision following cesarean section was evaluated in a small, poorly controlled study. Laser light was applied for 15 minutes on 3 consecutive days postoperatively. On the third day, serum prolactin levels were not significantly different in the two groups. The treatment appeared to help wound healing.[11]

A small, randomized study compared primiparous mothers who were supplementing their infants with formula during the first month postpartum and who received either 12 sessions of low-level laser light to the breasts over

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3 weeks (n = 20) or no treatment (n = 20). All mothers received similar counseling by a blinded physician certified in lactation counseling. The treated group had greater increases in serum prolactin, and breastmilk lactose, protein and fat at 3 weeks and 3 months after the start of therapy.[14]

A randomized study of women (n = 20 in each group) who were mixed feeding their infants in the first month postpartum compared 12 session of electroacupuncture or low-level laser therapy to the breast over 1 month and control women. All women also received oral domperidone 10 mg three times daily. Laser therapy increased serum prolactin, infant weight and maternal perception of milk production more than domperidone alone, but less than electroacupuncture.[15]

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Substance Identification

Substance Name

Phototherapy

Drug Class

Breast Feeding

Lactation

Milk, Human

Laser Therapy

Low-Level Light Therapy

PUVA Therapy