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NLM Citation: Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006-. Phototherapy. [Updated 2020 Mar 16].
Bookshelf URL: https://www.ncbi.nlm.nih.gov/books/

Phototherapy

Revised: March 16, 2020.

Drug Levels and Effects

Summary of Use during Lactation

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

Laser therapy was used in some Russian and Austrian studies to prevent and treat lactation mastitis and nipple fissures.[3-7] 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.[8] In the other, a single application of laser light resulted in no difference in nipple pain during the first 24 hours after application.[9]

A study from Bulgaria used laser acupuncture to stimulate lactation.[10] One small study reported only as an abstract found that low-level laser therapy of the breasts resulted in increases in serum prolactin, and breastmilk lactose and protein.[11] Laser application to cesarean section wounds did not adversely affect serum prolactin.[12]

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.[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.[12]

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

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.[11]

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Substance Identification

Substance Name

Phototherapy

Drug Class

Breast Feeding

Lactation

Laser Therapy

Low-Level Light Therapy

PUVA Therapy