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Cabbage

Revised: December 3, 2018.

Drug Levels and Effects

Summary of Use during Lactation

Cabbage (Brassica oleracea) leaves have been applied topically to the breasts to treat breast engorgement.[1][2][3][4] Some investigators cut out a hole in the leaves to keep the nipples dry. Leaves have been applied frozen, refrigerated or at room temperature. Various studies found cabbage leaves beneficial for reducing breast engorgement and pain regardless of temperature. However, a meta-analysis concluded that there is no good evidence that topical cabbage leaves were better than no treatment, because engorgement tends to improve over time regardless of treatment. The authors felt that the intervention was cheap, unlikely to cause harm and might be soothing for the mother.[5] Unrestricted nursing of the infant may be an important factor in reducing engorgement.[1][4] Some low-quality evidence indicates that maternal cabbage ingestion might cause colic in their breastfed infants.[6]

Drug Levels

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

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

Effects in Breastfed Infants

No side effects have been reported after topical application of cabbage leaves to the breast. Maternal cabbage intake was studied as a possible cause of colic in breastfed infants. A questionnaire was sent to nursing mothers asking about food intake during the previous week and their infants' symptoms of colic during that time. Seventy-three mothers who reported colic in their infants during the prior week were 30% more likely to have eaten cabbage during this time than mothers of infants who did not have colic during the previous week. Additionally, many other mothers reported avoiding cruciferous vegetables (e.g., broccoli, cabbage, cauliflower) because of previous symptoms of colic in their breastfed infants that they attributed to these foods.[6]

Effects on Lactation and Breastmilk

In a randomized, nonblinded study, postpartum hospitalized women with breast engorgement during breastfeeding either applied refrigerated cabbage leaves to their breasts (n = 59) or received routine hospital care (n = 56). The women who used the cabbage leaves breastfed exclusively for slightly longer than those who did

not (36 vs 30 days). At 6 weeks postpartum, there was no statistical difference in the percentage of women breastfeeding between the two groups The authors felt that any difference was most likely caused by psychological mechanisms in the mothers than the cabbage leaves.[1] This study suffered from a 20% loss to follow-up.

A study investigated cabbage leaves at different temperatures in the treatment of breast engorgement in hospitalized postpartum women (n = 28). Each mother received chilled leaves to one breast and room temperature leaves to the other in a randomized order. Both treatments reduced perceived breast pain, but no difference was found between the chilled and room temperature cabbage leaves in reducing the pain of engorgement.[2]

A study compared chilled cabbage leaves to cold gelpacks in the treatment of breast engorgement in hospitalized postpartum women (n = 33). Both had cutout areas around the nipple. Affected women applied a cabbage leaf to one breast and the gelpack to the other as needed at 2- to 4-hour intervals. There was no difference in the breast pain reduction between the cabbage leaves and gelpacks.[3]

A randomized, double-blind study compared a cream containing cabbage extract (n = 21) to a placebo cream (n = 18) for treating breast engorgement. The cream was specially made for the study using a 1% cabbage extract according to the methods of the British Pharmacopoeia and the same cream base as the placebo. Mothers rated their pain and breast firmness, and a device was used by researchers to measure breast firmness. Both treatments improved all measured parameters, with no difference between the two treatments. Nursing the infant had a greater effect on perceptions of discomfort and the hardness of the breast tissue than either of the creams.[4]

A study compared the effectiveness of topical use of alternating cold and hot compresses (n = 30) to frozen cabbage leaves (n = 30) for the treatment of breast engorgement. The study was not randomized or blinded. Each treatment was applied for 30 minutes 3 times daily for 2 days. Outcomes were judged using breast engorgement and pain scales, although it is unclear who did the rating. Both treatments were effective in reducing pain and engorgement. The authors concluded that hot and cold compresses were more effective than cabbage leaves,[7] but this conclusion is not justified by the study design.

An uncontrolled pilot study in 30 women with breast engorgement compared pain scores before and after the mothers applied refrigerated cabbage leaves to their breasts twice daily for 3 days for 15 to 20 minutes. Engorgement scores were lower after 3 days than at the beginning of the study.[8]

A small, nonrandomized, nonblinded study in Korea compared early breast care with and without chilled cabbage leaves applied to the breast and general nursing breast care in primiparous mothers after cesarean section. Breast hardness, as measured objectively with a pressure sensor, was lower on days 2, 3 and 4 postpartum in the mothers who received the cabbage leaves, but no difference in subjective pain scores was seen.[9]

A randomized, nonblinded trial compared cold cabbage leaves to cold gel packs and no treatment in 228 women with breast engorgement. All patients received routine care. Mothers in the cabbage group reported being slightly more satisfied with treatment than those in the other groups. No difference was found in the rates of breastfeeding between groups at 3 and 6 months postpartum.[10]

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Substance Identification

Substance Name

Cabbage

Scientific Name

Brassica oleracea

Drug Class

Breast Feeding

Lactation

Complementary Therapies

Food

Phytotherapy

Plants, Medicinal