CABERGOLINE and LACTATION SUPPRESSION

A narrative synthesis review

- Although lactation suppression may seem counterintuitive in an era where breastfeeding is widely promoted, it is sometimes required for the benefits of maternal and infant well-being.
- For majority of women, lactation begins 2-3 days after the birth of a child.
- In the absence of breast stimulation from infant suckling, lactation will eventually cease on its own in the span of days to weeks.
- In the meantime however, up to two-thirds of non-breastfeeding women may experience moderate to severe engorgement, as well as emotional guilt related to social and cultural expectations.

Q: WHO WOULD BENEFIT FROM LACTATION SUPPRESSION?

- Women who experienced stillbirth, neonatal death or infant adoption where breastfeeding is no longer required.
- Women with illness that necessitates avoidance of breastfeeding such as an HIV infection.
- Women undergoing chemotherapy or other treatments that have not been studied in breastfeeding women.

Q: WHAT IS AVAILABLE CURRENTLY?

- Non-pharmacologic: tight breast binding, fluid restriction, icing, avoidance of tactile breast stimulation. The efficacy on these methods are few and inconclusive.
- Pharmacologic: estrogen-androgen combination, bromocriptine. Their effects are few and inconclusive.

Q: WHAT IS CABERGOLINE?

A synthetic ergoline with high specificity and affinity for the dopamine D2 receptors. It is commonly used to treat hyperprolactinemia by acting on anterior pituitary gland to inhibit prolactin secretion.

METHODOLOGY

Studies were identified through electronic database searching (Cochrane library, EMBASE, Medline, IPA and Scopus) to identify all relevant studies that evaluated the use of cabergoline as lactation inhibitor in postpartum women. Citations were screened and a narrative synthesis was undertaken given the heterogeneity of study designs.

OBJECTIVE

Evaluate safety and effectiveness of cabergoline in puerperal lactation suppression.

RESULTS

A total of 7 studies met inclusion criteria. Majority are randomized controlled trials recruited healthy postpartum women electing for lactation suppression for personal reasons. A range of 0.4mg to 1mg of cabergoline was given within 6 to 50 hours of delivery. Dose-response relationship is established, and complete success was achieved highest with 1mg of cabergoline, with time to cessation between 0-1 day. Cabergoline is found to be non-inferior to bromocriptine in lactation inhibition and has less rebound symptoms and adverse effects. Common adverse effects of cabergoline reported include dizziness, headache and nausea. Majority are mild and self-limiting, occurring in the first 3 days and tapers off significantly there after.

CONCLUSION

Cabergoline is demonstrated to be simple, effective and safe when given to postpartum women in whom breastfeeding is contraindicated or where lactation is futile and would only cause pain and undue psychological distress.

REFERENCES