Breastfeeding an older baby whilst experiencing an ectopic pregnancy

The information on this sheet is based upon my professional experience as a pharmacist with a specialised interest in the safety of drugs in breastmilk, supported by evidence from expert sources. However, I cannot take responsibility for the prescription of medication which remains with the healthcare professionals involved. I am happy to discuss the evidence by email wendy@breastfeeding-and-medication.co.uk

An ectopic pregnancy is when a fertilised egg implants itself outside of the womb, usually in one of the fallopian tubes. Unfortunately, it is not possible to save the pregnancy and it must be removed either by surgery or the use of methotrexate.

NICE recommends that methotrexate (unlicensed but commonly used) is used as a first-line treatment to women who have all the following:

- no significant pain
- an unruptured ectopic pregnancy with no visible heartbeat
- a serum chg. level less than 1500 IU/litre
- no intrauterine pregnancy (as confirmed on an ultrasound scan).

Surgical intervention may be an emergency or a preferred option for the woman who does not want to use methotrexate. Breastfeeding can continue as soon as the mother is awake and alert. Mothers who are currently breastfeeding an older child can continue 24 hours after the methotrexate is administered. She should be advised not to conceive for 3 months (Hale).

Research on methotrexate levels in breastmilk

"It is apparent that the concentration of methotrexate in human milk is minimal, although due to the toxicity of this agent and the unknown effects on rapidly developing neonatal gastrointestinal cells, it is probably wise to pump and discard the mother's milk for a minimum of 24 hours post dose if given as a single dose (e.g. 50 mg/m2 IM for ectopic pregnancy)" (Hale)

"Limited information indicates that a maternal dose of methotrexate up to 65 mg (or 50 mg/square meter) produces low levels in milk, leading some authors to state that low single or weekly doses, such as those used for ectopic pregnancy or rheumatoid arthritis, are of low risk to the breastfed infant" (Lactmed)

Johns studied a lactation mother receiving 22.5 mg/day oral dose of methotrexate to treat a choriocarcinoma. The highest milk:plasma concentration ratio, 0.08:1, was observed 10 hr. after

administration of the drug. Based on the results of their studies the authors concluded that methotrexate therapy in breastfeeding mothers would not pose a contraindication to breastfeeding (Johns 1972)

Thorne presented the results of a case study on a mother who reinitiated her use of 25 mcg per week methotrexate to control her symptoms of rheumatoid arthritis. The maternal serum concentration was 0.92 µM 1 hour after her dose was given, breastmilk samples taken at 2, 12 and 24 hours after her dose were 0.05 µM (detectable but below the level of quantification). The authors estimated the average infant dose to be 3.4 µg/kg/day (22.7 µg/L), this was based on the 0.05 µM concentration remaining steady for the full 24 hours after maternal dose administration. The authors found a relative infant dose of about 1%. This infant continued to breastfeed for another 9 months. No adverse events were reported in the infant.

Conclusion

Long term weekly use of methotrexate is not addressed in this information but purely the single treatment of 50 mg/m2 IM for the management of an ectopic pregnancy.

Pumping and dumping of maternal milk for 24 hours will reduce the levels in the milk so that monitoring of the baby's blood is unnecessary.

The trauma of losing an expected pregnancy is traumatic but to additionally abruptly lose the relationship with an older baby who is continuing to nurse would be very difficult and is unnecessary based on the research presented here

References

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