Breast milk transmits drugs and medicines to the baby

EurekAlert

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There is great confusion among the scientific community about whether women who are drug abusers should breast feed their babies. In order to shed some light on this issue, scientists from various Spanish hospitals and research centres are reviewing the methods used to detect substances in breast milk, their adverse effects, and the recommendations that mothers should follow in this month's issue of the journal *Analytical and Bioanalytical Chemistry*.

"The general recommendation is to totally avoid drug abuse while breastfeeding, because these substances can pass directly through to the newborn", Ã“scar GarcÃ-a Algar, co-author of the study and a doctor in the Paediatrics Department at the Hospital del Mar in Barcelona, tells SINC.

The researcher adds: "This recommendation extends to the prenatal period, because these substances are passed on to the foetus via the placenta, and then in the postnatal period via the environment. If they have exposure through the milk, they will certainly also have had it during the pregnancy, and they can also be in the environment, as is the case with tobacco smoke".

For this study, the team used the average daily intake of the breastfeeding baby, around 150 millilitres of milk per kilo of weight, as a benchmark. The recommendations are listed for each substance, taking the advice of the American Academy of Pediatrics (AAP) as a reference.

Nicotine, caffeine and alcohol

The breast milk of smoking mothers contains between 2 and 240 nanograms of nicotine per millilitre, which means their babies receive a dose equivalent to 0.3 to 36 micrograms/kg/day. These infants tend to suffer more from colic and are more prone to respiratory infections.

The advice is to give up smoking during pregnancy and breastfeeding, or at least to limit the habit as much as possible, extend the time between the last cigarette and the baby's feed, use nicotine patches, smoke outside the house and avoid smoky environments.

Caffeine found in coffee, tea, cola drinks and medicines can cause irritability and insomnia. Although the level of caffeine absorption varies greatly from one person to another, this substance has a lengthy half-life in newborns. For this reason, it is recommended to reduce consumption during breastfeeding to a maximum of 300

mg/day, equivalent to around three cups of coffee per day.

For alcohol, the exact risk is still ill-defined, and no studies have been carried out to correlate the dose, although some research suggests it can harm the infant's motor development, as well as causing changes to their sleep patterns, reduce the amount they eat, and increase the risk of hypoglycaemia.

The AAP feels that alcohol consumption is compatible with breastfeeding, but this study states that no amount can be considered safe until the levels in breast milk are established. Strategies for minimising risk include feeding the baby before consuming alcoholic drinks, or at least allowing two or three hours to pass after drinking. Alcoholic women are advised to feed their babies with a bottle.

The risks of alcohol to the foetus in pregnant women have already been shown. "But despite this, a recent study by our group showed that 45.7% of the women who came to give birth in our hospital had consumed considerable amounts of alcohol during pregnancy", says the doctor.

Cannabis, cocaine and other drugs

Cannabis, which is transmitted both through the mother's milk and smoke, can cause sedation, lethargy, weakness and poor feeding habits in breastfeeding babies. The long-term risks are also unknown. Women are advised not to use it, but if they use marijuana occasionally, the experts advise them to do so several hours before feeding, and not to expose their children to the smoke.

The advice on cocaine, meanwhile, is to "totally avoid it" during breastfeeding. The first case of toxicity caused by this drug through breast milk was a baby boy just two weeks old who suffered irritability, trembling, dilated pupils, tachycardia and high blood pressure after feeding.

Women are also advised against breastfeeding if they take amphetamines. These can cause agitation, crying and lack of sleep. Using them also reduces a mother's ability to care for her children.

Breastfeeding is not recommended either for women who use heroin, which is excreted into the milk in sufficient amounts to cause addiction in the baby. In the case of "need", the advice is to allow at least one or two days to pass after taking the drug before feeding the baby, and to start a substitute treatment as soon as possible, if possible with methadone.

Other opiates used as medicines morphine, meperidine and codeine are excreted into the milk in minimal amounts and are compatible with breastfeeding, as are benzodiazepines, as long as they are taken in controlled doses. These are the drugs most frequently prescribed to women during pregnancy and after birth.

In terms of anti-depressant and anti-psychotic drugs, the AAP says "these can be a cause for concern during breastfeeding". For now, their effects on breastfeeding babies are unknown, and further studies are recommended.

SOURCE [2]

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