From mother to child

Most drugs taken by the mother pass to her child during pregnancy and breast-feeding, exposing the child to the pharmacological effects of these medications. This intimate connection complicates decisions about whether and how to treat pregnant and nursing women, it can require specific monitoring and it must be taken into account in the harm-benefit balance of maternal treatment. There are similarities between the situation during pregnancy and the situation during breast-feeding, but also notable differences.

Neither the pharmacokinetic nor clinical consequences of using a drug while breast-feeding can be deduced from the data available on its use during pregnancy. Nothing can be done to prevent the transfer of drugs and their active metabolites from maternal blood to fetal blood during pregnancy. In contrast, breast-feeding can be halted temporarily or permanently. During breast-feeding, drugs and their metabolites enter the baby’s gastrointestinal tract, where various factors will influence the quantity absorbed. As infants grow, their enzyme systems mature, and their ability to metabolise and eliminate drugs increases. Embryos and fetuses are more sensitive to the effects of drugs than breastfed infants, and breastfed infants are more vulnerable than 3-year-old children.

However, there are more and greater uncertainties surrounding the effects of drug exposure during breast-feeding than during pregnancy.

In order to deal with these uncertainties, some basic knowledge, and a few concepts and questions can help healthcare professionals and patients make informed, shared decisions: whether or not the mother should be treated; whether she should start, continue, interrupt or stop breast-feeding during treatment; and how the breastfed baby should be monitored.

The article on pp. 302-306 of this issue sets out the principles of such an analysis. The objective is to steer a course that does not trivialise the use of drugs while breast-feeding, yet allows the mother access to beneficial treatments, without unnecessarily denying her baby the benefits of prolonged breast-feeding.

Once this type of approach has been explained to parents, they can apply it to other situations in which they must decide whether or not treatment should be administered. The questions are the same whether treatment is for a child, another relative or themselves. What would happen without treatment? What is the goal of treatment? What risks would be acceptable in order to achieve this objective?