

DRUG INFORMATION

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SAFETY OF SULINDAC IN PREGNANCY

Question:

What are the risks associated with the use of sulindac in pregnancy? The woman has ingested sulindac for the first nine weeks of pregnancy.

Answer:

First-trimester

The use of non-steroidal anti-inflammatory drugs (NSAIDs) in the first trimester of pregnancy does not appear to be considered teratogenic^[1-4]. However, there have been anecdotal reports associating the use of NSAIDs with bilateral phocomelia and penile agenesis (n=1, indomethacin), hydrops (n=1, indomethacin), cerebral palsy (n=2, ibuprofen), generalized seizures (n=1, ibuprofen) and anencephaly (n=2, ibuprofen), although a causal relationship between these events and NSAID exposure has not been made^[1,3-5].

There is limited information specifically describing outcomes following first-trimester exposure to sulindac^[1,3,6,7]. In a surveillance study of Michigan Medicaid recipients, 69 newborns were identified as having been exposed to sulindac in the first-trimester. Three (4.3%) major defects were observed (three would have been expected in the general population)^[3].

Second and third trimesters

NSAIDs including sulindac are generally considered contraindicated in the latter stages of pregnancy. All NSAIDs inhibit prostaglandin synthesis and, when given in the third trimester of pregnancy, may cause adverse foetal cardiovascular effects including constriction of the ductus arteriosus and neonatal pulmonary hypertension. NSAIDs may also inhibit uterine contraction, prolong the length of gestation and delay the onset of labour when given in the later stages of pregnancy. They may also cause oligohydramnios associated with reduced foetal renal function^[1-5].

Conclusions:

Inadvertent exposure to NSAIDs in the first trimester of pregnancy does not appear to be associated with an increased risk of foetal malformations, although data specifically for sulindac is lacking. We would generally advise that all drug therapy is discontinued in the first trimester, unless benefits are considered to outweigh foetal risks.

The use of any NSAID during the latter stages of pregnancy is not recommended due to the potential to cause complications such as premature closure of the ductus arteriosus, pulmonary hypertension and renal dysfunction in the newborn, and perinatal bleeding.

References:

1. Drugdex, Micromedex database
2. AHFS Drug Information 2000
3. Briggs GG *et al.* Drugs in pregnancy and lactation (5th ed), 1999
4. Schardein JL. Chemically induced birth defects (2nd ed), 1993
5. Rubin P (ed). Prescribing in pregnancy (2nd ed), 1995
6. Medline database 1966-2001
7. Embase database 1988-2001

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