

## DRUG INFORMATION

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### SAFETY OF DICLOFENAC PREGNANCY

#### Question:

What is the safety of diclofenac in the 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<sup>[1-4]</sup>. 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<sup>[1,3-5]</sup>.

##### *Second and third trimesters*

As a class, NSAIDs are generally considered to be 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<sup>[1-5]</sup>.

#### Conclusions:

Inadvertent short-term exposure to diclofenac in the first trimester of pregnancy does not appear to have been associated with malformations. However, it is difficult to be definite due to the lack of information available describing the use of NSAIDs during the first and second trimesters of pregnancy. As always, it is preferable to avoid the use of all medicines during pregnancy, especially the first trimester.

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

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