

Kofinas Perinatal

Providing Care to the Unborn

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Lovenox (Enoxaparin) and Pregnancy

Patient Information on Lovenox (Enoxaparin) safety during pregnancy:

Enoxaparin (Fraxiparin, Lovenox, Clexane) is a low molecular weight heparin, produced by chemical or enzymatic depolymerization. Enoxaparin retains the antithrombin effects of heparin but only some of the anticoagulant effects.

Although clinical and animal studies have indicated that enoxaparin and other low molecular weight heparins do not cross the placenta, one study in sheep suggested that these agents may alter the fetal coagulation system. In a Japanese study performed using rats, doses up to 20 mg/kg did not have adverse fetal effects. When radiolabeled enoxaparin was used in a perfused placental model, a small amount of the label appeared in the fetal circulation, although biologic activity was again undetectable. The clinical use of this form of heparin has been proposed for the prevention of thrombosis and in the treatment of intrauterine growth retardation.

In a study of 69 pregnancies treated with this drug, there were five early miscarriages, four midtrimester fetal losses, and seven preterm deliveries. The authors suggested that these adverse outcomes might have been due to the antiphospholipid syndrome, which was the basis for the treatment in at least some of the women. A more recent study involved 31 women with a history of thromboembolism or positive findings for thrombophilia who were prescribed enoxaparin (40 mg daily) in combination with low-dose aspirin (100 mg daily) in the first or second trimester. Birth outcomes were compared with those in 15 patients who received low-dose aspirin alone. No significant differences were noted between the groups in the incidence of congenital malformations or abortions, IUGR, or preterm deliveries. Review of records of 108 pregnant women who received the low molecular weight heparin, certoparin, did not reveal adverse neonatal effects attributed to the medication. Treatment of 11 women with mechanical heart valves with enoxaparin and aspirin during 14 pregnancies resulted in 3 miscarriages, 2 pregnancy terminations, and 9 apparently normal children. An analysis of data from Danish pregnancy registries also suggested that the use of low molecular-weight heparins were not associated with an increased risk of malformations, low birth weight, or stillbirth. However, an increased risk of pre-term delivery was found (odds ratio: 2.11, 95%, confidence interval: 0.96-4.65), which these authors also suggested could reflect inherited thrombophilia, which was as an indication treatment with low-molecular-weight heparin.

In conclusion, there is no serious scientific evidence that Lovenox is harmful to the baby and when we prescribe Lovenox, the benefits of its use far outweigh the risks.

Usage of Lovenox during breast-feeding: Patients with certain genetic types of thrombophilias require anticoagulation treatment for 3 months postpartum. A limited number of studies have shown that Lovenox is safe during breast-feeding. If your baby's pediatrician is uncomfortable with the usage of Lovenox during breast-feeding, you may use Heparin 5000 IU SC twice a day (every 12 hours).