Use of Atracurium Besylate to Arrest Fetal Activity During Intrauterine Intravascular Transfusion

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Prevention of fetal movement during intrauterine intravascular transfusions is important to minimize fetal trauma and facilitate the procedure. This is particularly true in cases of posterior implantation of the placenta when the amniotic cavity must be traversed to reach the umbilical cord root for blood sampling. Maternal sedation is frequently insufficient for these procedures.

Atracurium besylate was administered to the fetus via the umbilical vein during 12 intrauterine intravascular transfusion procedures performed in 6 patients suffering from Rh isoimmunization. The mothers were premedicated with a combination of IV meperidine, prochlorperazine and diazepam. Additionally, they received ritodrine for tocolysis during the procedure and cefazolin for antibiotic prophylaxis. After needle entry into the umbilical vein, atracurium in a dose of 0.2-0.4 mg/kg of estimated fetal weight was injected. With a dose of 0.2 mg/kg, fetal movement was slowed transiently. Thereafter, 0.4 mg/kg was administered. Paralysis for the duration of the procedure ensued. Fetal activity returned 20-130 min later.

Paralysis of the fetus with either IM curare or IM or IV pancuronium (see OAD **8**(2):71) has been reported. The IM route of injection has the potential to cause nerve trauma or hematoma formation. Futhermore, the absorption of the drug from the site of an IM injection is variable. As to the drugs themselves, both curare and pancuronium are partly dependent on biliary excretion for their elimination. However, the erythroblastotic fetus may suffer from hepatic compromise. In contrast, the primary route of elimination of atracurium is by Hoffman elimination (a nonenzymatic self-destroying mechanism) and thus atracurium may be the drug of choice for feta immobilization.

SHORT TAKES

Obstetric Anaesthesia: Informed Consent

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A brochure providing parents-to-be with an introduction to the obstetric anesthesia service was mailed to all registered gravidae 6-8 weeks before the expected date of delivery. In July and August 1988, 62 women were randomly selected for elucidating their response to the brochure. These women were healthy, at term in early labor, comfortable and without sedative or narcotic drugs on board. Only 33 of the women recalled receiving the booklet and of these, only 2 remembered the contents. Four parturients felt that the brochure contained too little information and six were unsure if it gave enough knowledge for "informed consent". This illustrates the problem of obtaining "informed consent" before obstetric anesthesia. Information sent by mail will not eliminate the need for a one-to-one explanation at the time of hospital admission.