Mitoxantrone exposure in pregnancy: a case report.

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Background. Mitoxantrone (MIX) is a chemotherapeutic agent used for the treatment of aggressive MS. Because it intercalates with DNA, it is considered a potential human teratogen and it is classified by US Food and Drug Administration in pregnancy category D. There are some case reported of MIX exposure in pregnancy or during preconceptional period, 4 in oncological patients and associated with other drugs, only 2 in MS women[1,2]. In the first MS case the baby was normal, but she had low birth weight. In the second case, the infant suffers from Pierre Robin sequence, a severe disease characterized by various malformations.

Aim. To describe another case of mitoxantrone exposure in pregnancy in a MS patient.

Case History. We describe the case of a 24 years old female with MS, with onset of disease in the summer of 2011. She started MIX treatment after 4 months from diagnosis, on July 2013. She received a cumulative dose of 60 mg/mq and a total of 6 infusions since she found to be pregnant, the last one on March 24th.The supposed conception day was in March between 19th and 21st. The patient smoked until April 17th and she took oxybutynin for bladder dysfunction. The pregnancy was regular, with growth restriction during the entire period. On December 3td (39° week), the patient delivered a female healthy baby by natural childbirth. Her weigh was 2.314 kg (<5 percentile), the length 45 cm (<5 percentile) and the cranial circumference 30 cm. After 3 days the infant was sent home.

Discussion and Conclusions. Our case is only the third of MIX exposition described in MS pregnant patients. As in the first MS case reported, the only consequence of early MIX exposure was low birth weight. It is important to collect all the accidental MIX exposition in pregnancy to have more safety data.

References.

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2. Hellwig K, Schimrigk S, Chan A, Epplen J, Gold R. A newborn with Pierre Robin sequence after preconceptional mitoxantrone exposure of a female with multiple sclerosis. J Neurol Sci. 2011 Aug 15;307(1-2):164-5.