LETTER TO EDITOR (VIEWERS' CHOICE)

NEONATAL WITHDRAWAL SYNDROME FOLLOWING IN UTERO EXPOSURE TO SELECTIVE SEROTONIN REUPTAKE INHIBITOR

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A term male child was delivered by cesarean section to a 30year-old mother who had obsessive-compulsive disorder and was being treated with chlordiazepoxide (25 mg) and fluoxetine (20 mg) daily throughout pregnancy. The infant's Apgar scores were 5 at 1 minute and 9 at 5 minutes. The birth weight, length and head circumference were 2.19 kg, 42 cm and 31 cm respectively. At day three of life baby presented with jitteriness, decreased activity and feeding difficulty. On physical examination, activity was decreased, tone was increased in all four limbs with marked jitteriness. Total leucocyte count (TLC) was 4900 cells/cumm, absolute neutrophil count (ANC) was 1400 cells/cumm, band cell were 2% and CRP was 0.01mg/dl. Blood culture was sterile. Serum calcium, blood glucose, cerebrospinal fluid, electroencephalogram (EEG), neurosonogram and magnetic resonance imaging of brain were normal. He was treated with intravenous cefotaxime and amikacin for 7 days after which feeding improved but jitteriness persisted. Repeat TLC was 6100 cells/cumm while ANC was 1850 cells/cumm, band cells were 2%. Thus jitteriness was considered to be due to fluoxetine withdrawal however, the serum concentrations of fluoxetine of both the child and the mother could not be measured. The patient was discharged at 2 weeks with jitteriness but was feeding well. Follow up at four weeks did not reveal any further changes.

Fluoxetine, a selective serotonin reuptake inhibitor (SSRI) commonly used to treat depression, panic disorder and obsessive-compulsive disorder, is not contraindicated in pregnancy. (1) Prematurity, poor neonatal adaptation, jitteriness, hypoglycemia, hypothermia, poor muscle tone, respiratory distress, weak crying, and desaturation on feeding have been reported in such neonates. (2) There is an increased risk of neonatal complications for neonates born to mothers taking fluoxetine during the third trimester. (3) Plasma drug concentrations of SSRIs in neonates may help determine whether the symptoms are due to toxicity or withdrawal but differentiation can still be difficult since serotonergic toxicity may occur even at low therapeutic concentrations. (4) In our patient, we attributed the signs to fluoxetine withdrawal rather than to toxicity owing to the absence of hyperpyrexia, which is frequently seen in latter. Our patient was exposed to chlordiazepoxide in the first trimester and throughout pregnancy but no apparent gross anomaly was present. The symptoms presented at day 3 of life while neonatal withdrawal presents late in case of benzodiazepines which may be upto day 21 for chlordiazepoxide (5), hence the features were attributed to fluoxetine withdrawal. Whether the two drugs have any additive effect is not known due to lack of any such reports. In summary, an infant born to a mother who has taken an SSRI prior to delivery could develop significant neonatal complications that necessitate prolonged hospitalization hence a detailed maternal history and observation for few days may lead to diagnosis and apt management.

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