

Neonatal convulsions secondary to paroxetine withdrawal

Madam, It is well known that the use of selective serotonin reuptake inhibitors (SSRIs) in pregnant mothers can be associated with neonatal withdrawal symptoms. Paroxetine is a new SSRI and is gaining popularity as a potent antidepressant. Over the recent years, a few authors have reported the effects of paroxetine withdrawal in neonates. The most notable among these is a case series from North America.¹

We came across a term male baby born to a mother who was on 30 mg of paroxetine throughout pregnancy because of history of depression. Cardiotocogram (CTG) traces were found to be normal before delivery. Baby was delivered spontaneously and vaginally. He was born floppy and required resuscitation in the form of positive pressure ventilation with oxygen by tom-thumb mask for 2-3 minutes after birth. His cord pH at birth was normal (7.25). At 5 minutes of age, he was noted to have a tonic spasm of all the limbs. He was transferred to the neonatal unit, where he had a series of tonic convulsions from 15 minutes of age. His convulsions, though partially controlled with intravenous phenobarbitone, continued intermittently till about 48 hours. His full septic screen including total and differential white cell counts, blood and urine culture, C-reactive protein, chest radiograph and lumbar puncture, were negative. Urine toxicology was negative for opiates. Cranial ultrasound scan performed by Paediatric Radiologist was also reported as normal with no evidence of structural abnormality, ischaemic changes, haemorrhages or ventricular dilatation.

Apart from convulsions, he had intermittent hypertension, temperature fluctuations ranging from 35.1 to 38.6 degrees centigrade, hypoglycaemia and respiratory distress, all of which are known to occur with paroxetine withdrawal.^{2,3} Phenobarbitone was weaned off and then stopped at 2 months of age and he remained seizure free. Interestingly, convulsions have very rarely been identified as a manifestation in such babies.^{4,5} In 2003, Salvia-Roiges et al had

implicated in-utero exposure to paroxetine in a newborn who presented with convulsions and subarachnoid haemorrhage within the first six hours of life.⁵ It has been suggested that the convulsions could have been triggered by the ability of paroxetine to lower the seizure threshold.

Continuous convulsions and other manifestations during the first 48 hours despite correction of blood glucose along with lack of evidence for infection in the presence of normal CTG tracing and normal cord pH points towards paroxetine withdrawal as the most likely etiology. This child is now 15 months of age and his growth and development including neurodevelopment has been appropriate for age.

With the increasing popularity of paroxetine as an antidepressant, physicians, psychiatrists, obstetricians and pediatricians need to be aware of its potential effects on the baby. Paroxetine withdrawal should be considered in the differential diagnosis of a neonatal convulsion if there are obvious clues in the antenatal history.

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References

1. Stiskal JA, Kulin N, Koren G, Ho T, Ito S. Neonatal paroxetine withdrawal syndrome. *Arch Dis Child Fetal Neonatal Ed* 2001;84:F134-5.
2. Jaiswal S, Coombs RC, Isbister GK. Paroxetine withdrawal in a neonate with historical and laboratory confirmation. *Eur J Pediatr* 2003;162:723-4.
3. Costei AM, Kozer E, Ho T, Ito S, Koren G. Perinatal outcome following third trimester exposure to paroxetine. *Arch Pediatr Adolesc Med* 2002;156:1129-32.
4. Nordeng H, Lindemann R, Perminov KV, Reikvam A. Neonatal withdrawal syndrome after in utero exposure to selective serotonin reuptake inhibitors. *Acta Paediatr* 2001;90:288-91.
5. Salvia-Roiges MD, Garcia L, Gonce-Mellgren A, Esque-Ruiz MT, Figueras-Aloy J, Carbonell-Estrany X. Neonatal convulsions and subarachnoid hemorrhage after in utero exposure to paroxetine. *Rev Neurol* 2003;36:724-6.