



A Rare Case of Congenital Amniotic Band Syndrome

KEYWORDS

Amniotic band, Mifeprostone, Misoprostol, Acrosyndactyly, Congenital talus equinovarus (CTEV).

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ABSTRACT Amniotic Band Syndrome occurring in babies secondary to antenatal drugs is a rare presentation. We report a case of amniotic band syndrome in a 7 months old female child secondary to antenatal use of mifepristone and Misoprostol at the gestational age of 11 weeks, presenting with acrosyndactyly, bilateral C.T.E.V., lymphoedema of left thumb. The deformities were corrected surgically, and the child is improving well.

Introduction:

Amniotic band syndrome (ABS) also known as Constriction Ring syndrome is a well known disorder affecting the extremities far more frequently than face¹. Abnormalities result from bands of amnion that get attached to the developing foetus causing constriction that leads to webbing of toes, amputation of limbs and sometimes even severe defects like Talipes equinovarus and various joint contractures². The disorder is sporadic and is not inherited and the overall incidence of 1 in 15,000 births has been reported³.

Case Report:

A 7 months 14 days old female child with the birth history of normal vaginal delivery born to a non consanguineous couple at term gestation was brought to ASRAM hospital with complaints of fusion of tips of fingers of both hands, absence of little toe of right foot and internal rotation at the ankle joint of both lower limbs since birth. There was an antenatal drug intake history of Mifepristone and Misoprostol at the gestational age of 11 weeks for termination of pregnancy, but the termination was unsuccessful. Natal history was uneventful and the child was developmentally normal.

On clinical examination acrosyndactyly of all five fingers of right hand, acrosyndactyly of index, middle, and ring fingers of left hand and lymphoedema of left thumb along with CTEV of both lower limbs observed.

Complete hemogram, urine routine examination, 2D-Echo and usg abdomen were normal.

Band release and Z plasty was done in both hands. Orthopedic opinion was taken and parents were counselled for CTEV correction.

Discussion: In children with limb abnormalities that are consistent with a diagnosis of Amniotic constriction band, specific risk factors for ABS must be considered. Thalidomide, Warfarin, Phenytoin and several others including Misoprostol

cause vascular disruption in a limb that has formed normally thereby causing ABS.^{4,5} With reference to the current case in order to conclude the etiology of ABS a thorough antenatal history was taken. There was antenatal drug intake of Mifepristone and Misoprostol at eleven weeks of gestational age. Drug exposure at less than 12 weeks of gestational age is potentially associated with the occurrence of ABS as amnion rupture most likely occurs before 12 weeks of gestational age. Prior to 12 weeks of gestation, the amnion and chorion are completely separate membranes, and as such the amnion is more vulnerable to rupture, when any insult occurs in the form of trauma, drug exposure.⁶

Conclusion:

Antenatal drug intake is one of the most important risk factor for occurrence of ABS.

with reference to the current case use of Mifepristone and Misoprostol for the termination of pregnancy led to the occurrence of ABS. A thorough counselling to parents who opt for early termination of pregnancy with drugs should be given on the teratogenic effects and on the probability of occurrence of ABS in case of failure of termination of pregnancy.

Fig : 1 . Acrosyndactily of all five fingers of right hand and acrosyndactily of index, middle, and ring fingers. Lymphoedema of left thumb



Fig : 2. Band release and Z plasty

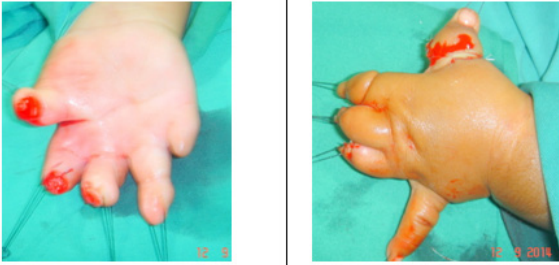


Fig : 3. Post operative after ten days

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