

Prenatal diagnosis and outcome of antenatally detected Congenital Talipes Equino Varus Deformity (CTEV) - Our Experience.

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Introduction

Club foot also known as congenital Talipes Equinus Deformity is the most common congenital anomaly of lower limbs. It has an incidence of 1 to 3 per 1000 live births. More than 50% cases are isolated. Isolated CTEV carries a good prognosis when intervened timely and appropriately in the postnatal period.

However, considerable number of malformations are associated with club foot like chromosomal abnormalities (Trisomy 13, 18 and 21), genetic syndromes and family history. Prenatal diagnosis can lead to identification of such anomalies that carry poor prognosis.

Accurate antenatal diagnosis helps the clinician to appropriately counsel the parents. It also gives an opportunity to the parents to know the abnormality in advance, the treatment aspects and prognosis.

Aim

The aim of the study was to evaluate the outcome of antenatally detected CTEV by ultrasonography and report the initial experience in our centre.

Method

It was a retrospective case series of 15 cases detected over period of one year between June 2020 to May 2021 in a tertiary care referral centre in Kerala.

Results

There were 15 cases of CTEV detected during one year period. The median gestational age at diagnosis was 22 weeks (19 – 25 weeks). Out of the 15 cases, 13 cases had associated anomalies and 2 cases were isolated CTEV. 8 cases were unilateral and 7 cases were bilateral CTEV. We have follow up for all our 15 cases

Of the 2 Isolated CTEV, one was unilateral and one was bilateral. None of them opted for invasive testing to determine the Karyotype and continued pregnancy. Both these babies were delivered and diagnosis was confirmed postnatally. Both these babies are put on cast, doing well and on follow up with local orthopedician.

Of the 13 cases with associated anomalies, 7 opted for medical termination of pregnancy and 6 cases continued pregnancy. Of the 6 cases who continued pregnancy, 3 babies (1 fetus had mesocardia, 1 had mild bilateral ventriculomegaly and 1 had macrocystic CPAM) were delivered and the diagnosis was confirmed postnatally and is on treatment and follow up from the local orthopedician. However, none of these three babies are now on treatment with cast. There was 1 Intrauterine fetal demise (IUD), 1 neonatal death (NND) and 1 baby is alive with suspected metabolic abnormality.

Conclusion

Isolated CTEV has a good prognosis. Prognosis of CTEV with associated anomalies depends upon the type of association. Hence accurate diagnosis of CTEV and detailed anatomical survey of the fetus is vital to appropriately counsel the parents to guide them to take an informed choice after the antenatal ultrasound examination.