Background: Cerebral palsy is a common and a lifelong disabling neurodevelopmental disorder, we attempted to address the relative lack of evidence on the role of Trihexyphenidyl in the management of dystonia in children with cerebral palsy.

Objectives: To study the short-term effect of trihexyphenidyl on dystonia and motor functions in children with newly diagnosed Cerebral Palsy.

Methods: A randomized, double-blinded, placebo-controlled, parallel-group trial was conducted in consecutive children aged 6 months-5 years at a tertiary care hospital. Following baseline evaluation, the study participants were randomized into two groups and were started on medication. Assessments were performed at baseline, 3, 6, and 12 weeks. A total of 50 children completed the study.

Results: After 12 weeks of medication, statistically significant improvement in median scores of GDS was seen in 10 body regions in the intervention group as compared to only 4 body regions in the control group and significant improvement in GMFM 88 in both the groups. The motor status assessed using GMFCS showed that there was a reduction in GMFCS level in 4 children in the intervention group as compared to only 4 body regions in the control group. DQ calculated using EDP-2 showed a significant change in the intervention group (p-value 0.026) at the end of 12 weeks but no change in the control group (p-value 0.218). However, no statistically significant difference was seen in the median change in outcome scores between the two groups.

Conclusions: This study could not document a statistically significant change between the two groups for the effect of trihexyphenidyl. A larger placebo-controlled trial, preferably multi-centric and with a longer follow-up period is needed to provide definitive results regarding the place of trihexyphenidyl in the management of dystonia in children with Cerebral Palsy.