

Bilateral Hip Reconstruction improve Hip Stability and Ambulatory function in Children with CP.

Dr. Verasak Thamkuanon

Orthopedist

Queen Sirikit National Institute of Child Health

Thailand

Abstract

Hip displacement is one of the most common problem in children with cerebral palsy especially in non ambulate patients. This problem would deteriorate gradually ambulatory function of the patients lead to hip contracture, pelvic tilt, scoliosis and pain finally. Bilateral hip reconstruction that consist of proximal femur and pelvic osteotomy not only correct the hip joint displacement but also help the muscle around the hip function easier and better , help balance the pelvis and improve over all of ambulatory function. We will present our result of treatment with bilateral hip reconstruction in 49 cerebral palsy patients with hip displacement and with a mean age of 7.6 years(2.7-19.7) in the aspect of ambulatory functional improvement and success in hip displacement correction. 39 patients(79.6%) in total of 49 patients had been satisfied with normal migration percentage hips (MP< 30%) after 2 years of operation. There were 10 patients have migration percentage of the hips more than 30% but only a patient has a migration percentage of the hip more than 50% at 2nd years follow-up. There were 20 patients detected pelvic tilt before operation and there were 6 patients left pelvic tilt after 2 years of operation. Four patients (8%) had loss of correction and their migration percentage of the hips had increased into level of hip subluxation(MP>30%) from 1st year to 2nd year follow-up but only 2 cases had re-operation due to pain and hip contracture. After 2 years of operation ,35 cases(71.4%) had improvement in sitting ability, 25 cases(51%) had improvement in standing ability and 6 cases (12.2%) in walking ability. We conclude that performing bilateral hip reconstruction could correct hip migration percentage effectively to be normal hip 79.6% of these series and improve ambulatory function to 87.7% of these series cases in the 2nd year follow-up for treating the cerebral palsy children with hip displacement.

Keyword: Cerebral Palsy, Bilateral Hip Reconstruction , Ambulatory function.