## Effect of Neurodevelopmental Therapy and Kinesiological Taping on Walking and Balance Parameters for Di George Syndrome: A Case Report

E. Kavlak<sup>1</sup>; A. Ünal<sup>1</sup>; F. Tekin<sup>1</sup>; A. Al Sakkaf<sup>1</sup>
Pamukkale University, Denizli, Turkey

Introduction: Di George Syndrome(DGS) is a congenital disease that is seen about one in every 4,000 live-births. Clinically, symptoms of the disease show a marked variability from patient to patient and also it is seen a typical facial expression (micrognathia, low-set ears, short philtrum) as well as frequent congenital heart defects, hypoparathyroidism and recurrent severe infections. General prophylactic treatment principles are applied for patients with combined T and B-cell deficiency. There is no specific physical therapy procedures for this syndrome. Symptomatic treatment is carried out according to common disorders.

Patient and Methods: 3.5 year-old girl with walking and balance disorders was admitted to Pediatric Rehabilitation Unit. Observational gait analysis, static and dynamic balance assessment was performed.1 hour a day,3 days a week using Neurodevelopmental Therapy(NDT) and clinical kinesiology taping by using correction were applied technique to lower extremities. Evaluations were repeated after 6 months.

Results: It was seen drop on medial longitudinal arch and calcaneovalgus for right foot, and also internal rotation and decreasing of stance-phase duration on right lower extremity, in pre-treatment assessment. Static and dynamic balance were "good" on sitting and crawling position, while "bad" for standing position. In post-treatment assessment, decreased internal rotation of the lower limbs and increased the duration for stance phase were found, while walking. Static and dynamic balance during standing was found "good".

Conclusion: A patient-DGS with walking and balance problems has benefited from NDT and kinesiology tape. It is important to begin physiotherapy earlier, for these types of cases.