Chapter 6

Pathological Gait

6.1: Introduction to Observational Gait Analysis

Observational gait analysis (OGA) is a critical skill that requires practice to accurately identify deviations and develop hypotheses of each deviation’s probable cause. Under the mentorship of Dr. Jacquelin Perry, the Pathokinesiology Service and Physical Therapy Department at Rancho Los Amigos National Rehabilitation Center (Downey, California) developed the Full Body Gait Analysis Form, composed of 178 check-off options for identifying both major and minor deviations during an observational analysis. In an effort to simplify the form, while maintaining the ability to identify important major deviations, the authors of this manual developed a new, abbreviated form (JAKC OGA form with 66 check off options). The form also includes measurement of walking speed (the sixth vital sign), stride length, and cadence with normative gender and age comparisons (% normal). Once gait deviations are documented, a problem solving approach is initiated to determine probable cause of each deviation and differentiate primary and secondary deficits from useful compensatory substitutions. The clinician develops hypotheses regarding probable causes of deviations, and then plans and performs the examination based on these hypotheses. Examination results are then evaluated with input from the patient/client and family to identify impairments, activity limitations, and participation restrictions (International Classification of Functioning, Disability and Health [ICF]). Together with the client and family, the clinician then sets realistic treatment goals and intervention plans.

Figure 6-1. Frontal plane observational gait analysis

Figure 6-2. Sagittal plane observational gait analysis