CHAPTER 5

Developmental Sequences

Objectives

The reader will be able to

1. list key behaviors for each of the five basic developmental sequences according to their primitive, transitional, and mature phases of development;
2. identify and describe key behaviors for each of the five basic developmental sequences;
3. identify movement components, muscle functions, reflexes/reactions, and postural control/movement patterns for each of the key behaviors;
4. analyze key behaviors according to their antecedents, purpose, and contribution to development of higher levels of behavior; and
5. apply specific aspects of developmental sequences to understanding of deviations from normal development.

Introduction

Achievement and use of upright posture, such as standing and walking, and an associated ability to explore and manipulate the environment, are underlying innate goals of a child’s developmental quest. Developmental behaviors that lead to upright functioning, such as creeping, provide not only early forms of movement for exploration, but also facilitate lower extremity components required for walking. Behaviors like creeping also contribute to development of upper extremity components required for reaching and grasping. Once a child is upright, walking becomes a major means for exploration and frees upper extremities from their support role, thereby creating possibilities for upper extremity exploratory and manipulative abilities to develop.

Literature concerned with central nervous system maturation identifies “hard-wired” and “soft-wired” systems (Figure 5-1). The hard-wired aspect of the human nervous system is thought to be comprised of certain genetic endowments that are “pre-programmed” with specific behavioral drives (e.g., getting up and walking on two feet). However,