
normal and abnormal gaits

essam el-din abd el aziz

Normal walking is defined as highly controlled, coordinated repetitive series of limb movements whose function is to advance the body safely from place to place with minimum expenditure of energy. Its complex neuro-motor act in bone and joints are moved by a series of muscles and tendons that neurologically controlled. Initiation of a desired movement begins with the cerebral cortex of the brain and evokes motor pattern in the central nervous system that is both voluntary and reflex. Human movement which is a complex combination of the basic forms of motion takes place around three cardinal planes. These are the sagittal, frontal and transverse.