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Kinematic analysis of human gait for typical postures of walking, running and cart pulling

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The purpose of gait analysis is to determine the biomechanics of the joint, phases of gait cycle, graphical and analytical analysis of degree of rotation, analysis of the electrical activity of muscles and force exerted on the hip joint at different locomotion during walking, running and cart pulling. Visual gait analysis and electromyography method has been used to detect the degree of rotation of joints and electrical activity of muscles. In cinematography method, an object is observed from different sides and takes its video. Cart pulling lengths have been divided into frames with respect to time by using video splitter software. Phases of gait cycle, degree of rotation of joints, EMG profile and force analysis during walking and running has been taken from different papers. Gait cycle and degree of rotation of joints during cart pulling has been prepared by using video camera, stop watch, video splitter software and Microsoft Excel.

Biography

Nupur Karmaker has done her B Sc in Biomedical Engineering and M Sc in Medical Physics, Heidelberg University, Germany. She is a Teaching Assistant for the Dept. of Medical Physics and Biomedical Engineering at Gono Bishwabidyala, Bangladesh.

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