A review on upper limb rehabilitation robots

ABSTRACT

Rehabilitation is the process of treating post-stroke consequences. Impaired limbs are considered the common outcomes of stroke, which require a professional therapist to rehabilitate the impaired limbs and restore fully or partially its function. Due to the shortage in the number of therapists and other considerations, researchers have been working on developing robots that have the ability to perform the rehabilitation process. During the last two decades, different robots were invented to help in rehabilitation procedures. This paper explains the types of rehabilitation treatments and robot classifications. In addition, a few examples of well-known rehabilitation robots will be explained in terms of their efficiency and controlling mechanisms.

Keyword: Exoskeleton; Electromyograph; Rehabilitation robots; Stroke