Abstract

Telemedicine is a method for remote consultations, a kind of personalized medicine by distance, where the deeper understanding of structures and functions of the human body are assisted by the development of more and more powerful computers joined together by vast telecommunications networks. The paper is devoted to a literature review about powerful computer systems that enable development of a conceptual model of the entire biological continuum of the human organism (that is, physiological systems, organs, cells, proteins and genes), based on imaging and visualization information. S. K. Mun and J. W. Turner [1] discuss application of three-dimensional body imaging, which incorporate into biomechanical models of muscles and bones, enabling simulations of planned surgical procedures.

Keywords: Telemedicine, information system, biomechanics