The Study of Focusing Pressure and Melting of Electrodes in Extracorporeal Shock Waves Therapy (ESWT) System

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ABSTRACT

The main goal of this research is to investigate the pressure distribution of the underwater shock wave focusing around the second focal point in the ESWT and its effects on the clinical therapy, by controlling the trigger voltage. The change of the pressure distribution with the increase of electrode gap caused by the electrode corrosion is also studied. In the experiment, ESWT, Ossa Tron OSA-140 in Show Chwan Memorial Hospital was used. The electrode trigger voltages of 14、18、22 and 26KV were set and the pressure distributions around the second focal point were recorded by a PCB pressure transducer and a data acquisition system.

Keywords : Extracorporeal Shock Waves Therapy, Shock Wave Focusing, Electrode Erosion

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