STUDY OF FRAGMANTATION OF UPPER URETERIC CALCULI BY EXTRACOPORIAL SHOCK WAVE LITHOTRIPSY (ESWL)

A PROJECT REPORT PRESENTED

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ABSTRACT

In general the surgery or Endoscopy, Extracoporial Shockwave Lithotripsy (ESWL) technique or combination therapy to the removal of urinary calculi. The stone in the upper ureteric calculi is removed mainly by ESWL. The aim of this project was to study the efficacy of ESWL in fragmenting calculi. In this study different diameter stones removed from patient by surgery were selected. Shockwaves were applied to study the fragmentation of the stone for different parameters (Intensity, frequency, number of shocks) of waves. In this study most stones were found to be forms of calcium oxalate. The experiment indicates the kidney (model) should be rotated around the iso-centre in the Anterior Posterior (AP) plane and easy to fragmentation occur around the angles of 30^0 (angle between AP plane and couch of treatment table). The fragmentation occurred with a minimum number of shocks and low intensities. The couch of treatment table 2500.10 machine should be arranged at this angle for optimal conditions. However this position is still not available with the 2500.10 machine.