Place of extracorporeal shockwave lithotripsy in the treatment of urolithiasis in the region of Gharb Chrarda Bni Hssen (Morocco)

Miloud Chakit
Biology and Health Laboratory, Faculty of Sciences, Ibn Tofail University, kénitra, Morocco.

The extracorporeal shockwave lithotripsy (ESWL) is a minimally invasive therapeutic approach which has been widely used through the last years. The aim of this study was to evaluate the effectiveness of ESWL in the treatment of nephrolithiasis in Gharb Chrarda Bni Hssen area (North of Morocco). A retrospective study of 590 patients with urinary stone was conducted between February 2009 and January 2013 in the Centre of Lithotripsy Anoual Clinic Kenitra. The treatment consisted in one or several sessions of ESWL. Evaluation of efficiency was based on radiological examinations using abdominal echography during the consultation with the urologist after the last session. There were 306 males and 184 females aged 17–79 years. The medium size of stone was 12.3 ± 5 mm. The average number of sessions and shock waves were 4 and 2490, respectively. The shockwave session was continued until stone fragmentation was observed when 4000 shocks were given. Failure of stone fragmentation or the presence of fragments larger than 4 mm were indications of repeat ESWL sessions. 92% of patient stones were completely cleared ($p < 0,05\%$). The majority of patients were asymptomatic. This data show that the ESWL is extremely successful in treating human kidney stone. It is the first line of choice as a treatment modality for this pathology by the population of this area.

Keywords: Urolithiasis,Treatment, Extracorporeal shockwave lithotripsy, Gharb Chrarda Bni Hssen area (Morocco)