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Research Title	Urinary Tract Stones Fragmentation using (2100 nm) Holmium: YAG Laser: (In vitro Analysis)		
Shared or Single	<input checked="" type="radio"/> Shared name	Lutfi G. Awazli and Ali S. Mahmood	<input type="radio"/> Single
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<ul style="list-style-type: none"> Abstract 	<p>Urinary stones are one of the most common painful disorders of the urinary system. Four new technologies have transformed the treatment of urinary stones: Electrohydraulic lithotripsy, ultrasonic lithotripsy, extracorporeal shock wave lithotripsy, and laser lithotripsy. The purpose of this study is to determine whether pulsed holmium laser energy is an effective method for fragmenting urinary tract stones in vitro, and to determine whether stone composition affects the efficacy of holmium laser lithotripsy. Human urinary stones of known composition with different sizes, shapes and colors were used for this study. The weight and the size of each stone were measured. The surgical laser system which used in our study is Ho:YAG laser(2100nm) with four adjustable parameters (Pulsed mode, Rep rate, Power, Exposure time). After each laser irradiation, the laser parameters (different energy setting, Rep rate) and the time of each stone fragmentation were recorded and also the stones fragments were weighed and sorted using a metal ruler. All stones studied were successfully fragmented with Ho:YAG laser. Although there were differences in stone fragmentation time and ablation based on composition</p>		