PARK SLOPE — New York Methodist Hospital (NYM) is now using a new, improved version of a common technology to dissolve kidney stones.

Extracorporeal shock-wave lithotripsy (ESWL) is a minimally invasive surgical procedure used to treat patients with kidney stones. Physicians in NYM’s Division of Urology, headed by Ivan Grunberger, M.D., make up the first team in the United States to use a new lithotripsy device that offers improved results. Kidney stones are solid masses of tiny crystals that can form in the kidneys and cause bleeding, kidney damage or ongoing urinary tract infections.

It is estimated that more than one million patients are treated with ESWL annually in the United States. “The new generation of lithotripter is capable of generating shock waves with the same intensity from one firing to the next, something that older models could not do,” said Grunberger. “This makes the pulverization of the kidney stones more accurate, and also means that a higher number of patients will be stone-free after the first treatment.”

The new lithotripter can also monitor patient movements in real time with revolutionary infrared tracking. If the patient moves slightly during the procedure, the machine locates the kidney stone and completes treatment. The extended penetration depth of the shock waves also allows for treatment of patients who are obese.

“With the added conveniences of a handheld ultrasound probe to locate the stones, and the ability to generate consistent shock waves, we can treat lithotripsy patients with more precision and accuracy than ever before,” said Grunberger. “The new ESWL technology gives our urologists the ability to better target and monitor stones, ensuring better patient outcomes.”

New York Methodist Hospital, a voluntary, acute-care teaching facility located in Park Slope, houses 651 inpatient beds (including bassinets) and provides services to almost 38,000 inpatients each year. An additional 300,000 outpatient visits and services are logged annually.