

## UROLOGY LASER SURGERY

Holmium laser energy may be used as an alternative to other energy devices for stone fragmentation and as an alternative to electrical current for cutting tissue in some urological endoscopic procedures. It is delivered through a flexible glass fibre down standard urological instruments, using established surgical techniques.

In the most part, these surgeries still require general anaesthetic and an in-hospital patient stay . It is an established technique for complex stone disease.

It has a role in tissue resection and is preferred by some surgeons in New Zealand and globally. When originally applied to prostate surgery, Holmium laser had advantages over traditional TURP prostate surgery, in that it allowed the procedure to be performed using saline.

Saline is a normal body fluid. This translated to earlier removal of catheter and discharge from hospital, less bleeding, and less biochemical disturbance at the time of surgery.

Subsequent technology developments with bipolar energy, integrated into tissue resection telescopes, now achieves these advantages for surgeries to prostate and bladder, but with a lower rate of urinary incontinence than Holmium laser. The laser has therefore lost application in these procedures.

Holmium laser remains an integral tool for management of complex kidney stones.