LithoClast® 2
Evolution in stone therapy
LithoClast® 2
The standard for safe, effective stone therapy

There is a system behind success

The method of the LithoClast® 2 from Richard Wolf generates energy without heat – risk of thermal damage in the urinary tract can be excluded, the tissue remains unchanged. No electric energy is used to generate the acoustic waves; both patient and surgeon are fully protected.

The effectiveness of the LithoClast® method results from the short treatment time regardless of the composition of the stone and its extremely flexible use throughout the entire urinary tract. And not least, it is the quality of all the device components and their user friendliness along with ease of maintenance that round off this unique success.

One optimises the other

- The newly developed LithoVac® suction system is easy to use and simple to clean and sterilise.
- The new generation of Richard Wolf endoscopes has an outstanding optical system – ureteroscopy with 50,000 pixel image resolution means a new dimension in endoscopic picture quality.
- Richard Wolf ureteroscopes and nephroscopes optimise stone therapy – simple, safe handling, no kinking of suction and lithotripsy probes thanks to a special adapter guide for ureteroscopes.

The newly developed LithoVac® suction system for continuous-irrigation ureteroscopy helps to control the "push-back effect".

LithoVac®
The new pneumatic handle pn3 – Innovative in functionality and design

The innovative handle of the LithoClast® 2

The pn3 handle is extra-light and ensures optimum handling thanks to its good ergonomic features. The coupling between the handle and compressed air line can be extended; the compressed air line is extra long while providing the same energy. This guarantees maximum freedom of movement in every situation. The pn3 handle with compressed air line is a self-contained system, it can be fully (steam) sterilised without an additional sealing cap. This means no liquid or dampness can enter and therefore the projectile does not become blocked causing failure of the handle. The probe fast locking mechanism of the handle allows simple, fast and sterile changes of probe. All components – handle and probes – are manufactured to the highest quality specifications and have an extremely long working life.

Richard Wolf LithoClast® handle pn3 compared with the standard handle – probe excursion measured at a pressure of 2.0 bar.
Treatment of all stone types in the entire urinary tract

1. Suction lithotripsy of ureteric stones with LithoClast® 2 and LithoVac®

2. Percutaneous stone fragmentation with LithoClast® 2 and LithoVac®

3. Pneumatic suction lithotripsy with LithoClast® 2 and LithoVac® in the bladder

Reliable fragmentation following extremely short treatment and regardless of stone composition

- The LithoClast® 2 transfers energy from the probe to the stone — risk of thermal damage to tissue is excluded
- No injury to the urothelium even after repeated application of pulses at the highest energy level of the LithoClast® 2
Flexible pulse frequency, controlled by the surgeon

The challenge in the further development of the Lithoclast® methods has a name – the “push-back effect”

The pushing back of mobile urinary stones caused by the lithotripsy pulse is a complication of the treatment. This is often the result of not adapting the pulse frequency to the treatment situation. This problem exists when the surgeon is not able to set or adapt the pulse frequency manually.

The Lithoclast® 2 counteracts the push-back effect – with three essential innovations

- The pulse frequency can be set in individual (Hz) steps – the double footswitch allows the surgeon free choice of single pulse, preset pulse frequency and boost frequency during the treatment
- The probe excursion has been significantly reduced – this reduces the forward propulsion of the stone during transmission of the pulse
- The newly developed LithoVac® suction system – suction lithotripsy in the ureter – allows continuous-irrigation ureteroscopy and controls the “push-back effect”

- Double footswitch – selection of single pulses, preset pulse frequency or full boost frequency
- Free choice of pulse frequency in 12 stages with single pulse or continuous pulse mode up to boost frequency – controlled by the surgeon using a double footswitch
LithoClast® 2 set  
consisting of:  
Control unit (2292001); electric footswitch (2292889); Richard Wolf pneumatic handle pn3 (8745310); adapter spacer (8745.212); probe cap (8745.332); compressed air tube (8175.711); probe guides (8742.051); silicone seals (4745.976); transport case (2295.201); LithoClast® probe (8742.004), Ø 2 mm, length 425 mm; LithoClast® probe (8742.001), Ø 0.8 mm, length 605 mm; LithoClast® probe (8742.003), Ø 1.6 mm, length 605 mm; LithoClast® handle set (8745300); silicone suction hose (8745.106); suction tube (8745.194), Ø 4 mm, length 353 mm; suction tube (8745.193), Ø 3.5 mm, length 380 mm; LithoClast® probe (8742.013), Ø 1.6 mm, length 453 mm for suction tube Ø 3.5 mm; suction tube (8745.192), Ø 1.6 mm, length 595 mm; LithoClast® probe (8742.012), Ø 0.8 mm, length 668 mm for suction tube Ø 1.6 mm; stone catcher (2296.510), sterile, pack of 10; stone catcher holder (2292025); compressed air tube (2295.811), with Dräger connector; power cable (2292850), European connector; fuses (2292889) .................... 2292005  

Sets with other power cables or compressed air tubes on request  

Accessories  
LithoClast® probes  
Probe Ø 0.8 mm, length 605 mm ............. 8742.001  
Probe Ø 0.8 mm, length 490 mm ............. 8742.021  
Probe Ø 1 mm, length 605 mm .............. 8742.002  
Probe Ø 1.6 mm, length 605 mm ............ 8742.003  
Probe Ø 1.6 mm, length 490 mm ............ 8742.023  
Probe Ø 2 mm, length 425 mm .............. 8742.004  

LithoVac® suction tube with corresponding probes  
Suction tube Ø 1.6 mm, length 555 mm .......... 8745.192  
also probe Ø 0.8 mm, length 668 mm .......... 8742.012  
Suction tube Ø 3.5 mm, length 360 mm .......... 8745.193  
also probe Ø 1.6 mm, length 453 mm .......... 8742.013  
Suction tube Ø 4 mm, length 330 mm .......... 8745.194  
also probe Ø 2 mm, length 425 mm .......... 8742.004  

LithoClast® handle set  
consisting of:  
LithoClast® handle (8745310); adapter spacer (8745.212); probe cap (8745.332); handle compressed air tube (8175.711); silicone probe guide set 2x (8742.051); silicone seals (4745.976); transport case (2296.201) .................... 8745300  

LithoVac® set  
consisting of:  
LithoVac® base section (8745103); suction set for LithoVac® (8745.106); suction tube (8745.192), Ø 1.6 mm (4.8 Fr.) x 595 mm; LithoClast®-probe (8742.012), Ø 0.8 mm (2.4 Fr.) x 668 mm .......... 8745400  

Air compressor  
Medical quality, 8 bar / 4 litre, 230 V .......... 2290.201  
also compressed air tube:  
Length 1 m .................................. 2295.804  
Length 3 m .................................. 2295.805  

Compressed air tube for central compressed air supply for France .................... 2292810  
for Dräger connector .................... 2295.811  

Stone catcher  
Stone catcher sterile, with two sterile suction tubes, individually packed, sterile (pack of 10) .................... 2295.510  

Guide for use of the LithoClast® handle with E-line ureterorenoscopes from Richard Wolf .................... 8702.251  

Probe cap for connecting probes  
Ø 0.8 mm to Ø 2 mm to LithoClast® handle pn3 .................... 8745.332  

Probe guides .................... 8742.051  

Silicone seals .................... 4745.976  

Fuses .................... 2292880  

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