Endoscopic Enucleation and Morcellation from KARL STORZ
All from a single source
Endoscopic Enucleation of the Prostate (EEP)

Instruments for all endoscopic enucleation techniques – “everything from a single source”

Treatment of benign prostate syndrome (BPS) is one of the most important fields of treatment in endourology. In the last 20 years, various OR techniques for transurethral endoscopic enucleation have been developed and implemented in the market. Endoscopic enucleation of the prostate (EEP) competes with the classic method of open adenoma enucleation as well as the gold standard, transurethral resection of the prostate (TUR-P).

In a publication of the EAU Guidelines in 2016, laser enucleation (e.g., HoLEP) and bipolar enucleation are grouped under enucleation of the prostate (EEP). Similar to classical transurethral resection, EEP is thus regarded as a treatment of choice for benign prostate syndrome (BPS).

To meet the requirements of this development, KARL STORZ presents variable configuration possibilities which enable you to perform both laser and HF-based applications using one basic instrument.

KARL STORZ provides you with a flexible system for all techniques and energy sources and, at the same time, expands its product line for enucleation with a morcellator system for the removal of prostate tissue.
Laser Enucleation and Bipolar Enucleation Formed Under the Acronym EEP

KARL STORZ concept conforming to EAU guidelines

The European Association of Urology (EAU) recommends various OR techniques in accordance with the size of the prostate. The “EAU Guidelines on the Management of Non-neurogenic Male Lower Urinary Tract Symptoms (LUTS), incl. Benign Prostatic Obstruction (BPO)” recommends endoscopic enucleation of the prostate (EEP) as the treatment of choice for significant enlargement of prostate adenoma (e.g., > 80 ml) as well as moderate to severe LUTS, whereby the choice of energy source is a secondary matter.

In line with these guidelines, KARL STORZ offers you a broad portfolio of instruments with the prerequisites for performing the enucleation technique of your choice.

Diagram based on the European Association of Urology (EAU) Guidelines from 2018
Customized Concept for all Requirements

Compatible system for endoscopic enucleation of the prostate

**Standard Instruments**

The standard instruments for performing endoscopic enucleation of the prostate correspond to those used for resection – telescopes, sheaths and obturators are identical for both procedures – only the working element used is different depending on the technique used. Instrumentation for EEP can therefore be conveniently adapted to your existing product portfolio.

The compatibility of our sheaths makes a fast changeover from enucleation to morcellation possible.

**Instruments for Laser Enucleation**

KARL STORZ offers various instruments for laser enucleation. In addition to the classic KUNTZ laser working element, a modular working element with exchangeable guide inserts for laser probes can be used. Exchangeable laser probes allow the instrument to be adapted to the diameter of the laser fiber used. The outcome is precise guidance and fixation of the laser fiber. The laser probes of the modular working element are optionally available with retracting beaks. These hold back the prostate tissue and provide a clear view during enucleation.

**Instruments for HF Enucleation**

Bipolar enucleation is a cost-effective entry to EEP as no acquisition or service costs are necessary for laser and the same working element is used as in bipolar resection. The passive working element in conjunction with the vapo-enucleation electrode permits mechanical-anatomical enucleation with resection, coagulation and vaporization properties combined in one instrument. The flat cuneiform electrode head, which protrudes slightly over the sheath, allows purely mechanical detachment of the inner prostate gland from the outer gland (surgical capsule). The shape of the electrode allows tissue separation and coagulation under the effect of the HF current. Furthermore, vaporization properties permit smoothing of the tissue.
A physician’s opinion on the bipolar vapo-enucleation electrode

The new bipolar vapo-enucleation electrode for mechanical anatomical enucleation of the prostate is a successful combination between a vaporization electrode and a mechanical dissection probe. The flat cuneiform probe allows detachment of the inner prostate gland (TI) from the outer gland (surgical capsule) through axial advancement of the electrode via the working element. This reduces the necessary mechanical stress on the urethra. Detachment of the interior prostate gland by means of mechanical ablation allows anatomically correct dissection under visual control. The excellent coagulation and vaporization properties of the electrode ensure good hemostasis and precise dissection in areas with adhesions between the interior and exterior prostate glands. In areas that require dissection, e.g. anterior fibromuscular stroma, the excellent vaporization properties of the electrode permit convenient smoothing of the wound base. Thanks to its mechanical stability, the probe can be used up to five times on medium-sized adenoma without compromising effectiveness.

Conclusion
The new bipolar vapo-enucleation electrode is a convenient multi-use probe for the anatomical enucleation of the prostate. Experience to date shows that the electrode is just as effective for anatomical (mechanical) enucleation as laser enucleation (HoLEP, ThuLEP). The only difference is that the electrode uses bipolar energy as an energy source for dissection (cutting) and coagulation rather than laser. The new vapo-enucleation electrode has the potential to provide a global response to the trend towards transurethral, cost-effective enucleation.

Prof. Dr. med. Thomas R. W. Herrmann, Department of Urology, 
Spital Thurgau AG, Switzerland

Development partner of KARL STORZ for the bipolar VapoEnucleation Electrode (27040 VE)

To view the application video, please scan the QR code
Morcellator System for Urology

Removal of the prostate tissue after enucleation

With the morcellator system, KARL STORZ has expanded its product line for enucleation with instrumentation for the removal of prostate tissue after enucleation.

An advantage of this system is that the S-PILOT® vacuum control unit and the UNIMAT® 30 suction pump can both be used with the existing central suction system, which presents a cost-effective solution.

- Time-saving tissue morcellation after enucleation of the prostate thanks to effective suctioning of tissue
- Communication between the motor and the suction systems via footswitch
- Individual installation in existing suction systems
- Possible to adjust oscillation speed (rpm) intraoperatively
System Components for Enucleation

Alternatives for the instruments selected in the diagram can be found on the following pages or in the UROLOGY catalog.
System Components for Morcellation

- **Cleaning Adaptors**, see page 15

- Sheath from basic instruments for enucleation
  - 27050 SCK

- Angled Telescope and Adaptor
  - 27293 AA and 27040 SC

- DRILLCUT-X® II URO
  - 27702050**

- UNIDRIVE® S III
  - 27701001-1
  - Blade
    - 27056 LM**

- S-PILOT®
  - UP 501 S2
  - Tubing Set
    - 031457-10*

- UNIMAT® 30
  - 25320001

- Tissue Trap Filter
  - 030970-10*

- Central Suction System
  - Suction Canister
    - 030306-04*
Standard Instruments for Enucleation

**HOPKINS® Telescopes**

- **27005 BA**  
  **HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

- **27005 FA**  
  **HOPKINS® Telescope 12°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

**Resectoscope Sheaths**

- **27050 SCK**  
  **Resectoscope Sheath**, quick-release lock, including connecting tube for in- and outflow, 26 Fr., oblique beak, rotating inner sheath with ceramic insulation, color code: yellow

- **27050 SLK**  
  **Resectoscope Sheath**, including connecting tube for in- and outflow, 26 Fr., oblique beak, rotating inner sheath with ceramic insulation, color code: yellow

**Obturator**

- **27040 OC**  
  **Standard Obturator**, for 24/26 Fr. sheaths

- **27050 BK**  
  **SCHMIEDT Visual Obturator**, for 24/26 Fr. sheaths, 27040 BK/BO/SD/SL, 27240 BO, 27241 BK/BO, 27042 B, 27242 BZ, 27050 SL
Laser Enucleation

KUNTZ Working Elements

27056 LA  KUNTZ Working Element, for use with 24/26 Fr. resectoscope sheaths 27040 SL, 27050 SL and laser probes up to 0.8 mm

27056 LB  Same, laser probes up to 1.5 mm

Modular Working Elements

27056 LE  Laser Working Element, for use with exchangeable laser probes with 24/26 Fr. resectoscope sheaths

27056 EA  Laser Guide Probe, inner diameter 0.8 mm, exchangeable, for use with Laser Working Element 27056 LE

27056 EB  Same, inner diameter 1.5 mm

27056 EC  Laser Guide Probe, with retracting beaks, inner diameter 0.8 mm, exchangeable, for use with Laser Working Element 27056 LE

27056 ED  Same, inner diameter 1.5 mm
HF Enucleation

Working Element (bipolar)

27040 EBH  **Electrotome**, bipolar, passive (cutting by means of a spring), movable thumb ring. In rest position the electrode tip is inside the sheath including:
- **Working Element**
- 2x **Cutting Loops**, bipolar
- 2x **Coagulation Electrodes**, bipolar
- **High Frequency Cord**
- **Protection Tube**

For bipolar enucleation, only the **passive** Working Element (27040 EB) is suitable.

VapoEnucleation Electrodes

27040 VE  **VapoEnucleation Electrode**, bipolar, hemispherical, 24/26 Fr., package of 6, color code: yellow

011169-10*  **VapoEnucleation Electrode**, bipolar, hemispherical, 24/26 Fr., sterile, for single use, package of 10, color code: yellow
High Frequency Surgery Units

UH 400
AUTOCON® III 400 High-End, with KARL STORZ-SCB control NEO, power supply 220-240 VAC, 50/60 Hz, including mains cord

UH 400U
AUTOCON® III 400 High-End, with KARL STORZ-SCB control NEO, power supply 100-127 VAC, 50/60 Hz, including mains cord

UH 801
Bipolar High Frequency Cord, length 400 cm, for KARL STORZ AUTOCON® III 400 SCB, for use with KARL STORZ bipolar resectoscopes

UF 902
Two-Pedal Footswitch, with button for switchover function, for use with HF generators
Morcellation

Standard Instruments

27293 AA  **HOPKINS**® Wide-Angle Straight Forward Telescope 6°, with angled eyepiece, autoclavable, fiber optic light transmission incorporated with working channel, with Luer-Lock connection for inflow, color code: green-red

27292 AMA  **HOPKINS**® Wide-Angle Straight Forward Telescope 6°, with parallel eyepiece, autoclavable, fiber optic light transmission incorporated with working channel, with Luer-Lock connection for inflow, color code: green-red

27040 SC  **Adaptor**, for use with Telescopes 27293 AA and 27292 AMA with resectoscope outer sheaths of 27050 SC/SD

27040 LB  **Adaptor**, for use with Telescopes 27293 AA and 27292 AMA with resectoscope outer sheaths of 27040 SL/SD and 27050 SL
27 701001-1 **UNIDRIVE® S III, Urology Set**, UNIDRIVE® S III motor system, with integrated SCB module, power supply 100-120/230-240 VAC, 50/60 Hz, for use with DRILLCUT-X® II Morcellator Handpiece URO 27 702050 and Morcellator Blade 27056 LM including:

**Mains Cord**

**One-Pedal Footswitch**, two-stage

**SCB Connecting Cable**, length 100 cm

27 702050 **DRILLCUT-X® II Morcellator Handpiece URO**, for use with the following accessories:

**Handle** 40 712090 and **Cleaning Adaptor** 41250 RA

40 712090 **Handle**, adjustable, for use with DRILLCUT-X® II N shaver handpiece

41250 RA **Cleaning Adaptor**, LUER-Lock, for cleaning DRILLCUT-X®/DRILLCUT-X® II handpieces

27056 LM **Morcellator Blade**, straight, sterilizable, drop-shaped cutting window, outer window serrated, inner window double fenestrated and serrated, diameter 4 mm, length 40 cm, for use with DRILLCUT-X® II Shaver Handpiece 27 702050

41200 RA **Cleaning Adaptor**, LUER-Lock, for cleaning the inner and outer blades of DRILLCUT-X® accessories
Suction

UP 501 S2  **S-PILOT® Set**, incl. control cable
   including:
   - **Connecting Cable**
   - **Tubing Set Suction**, sterile, for single use,
     package of 10

25 3200 01**  **UNIMAT® 30**, suction pump set, power supply 230 VAC,
   50/60 Hz
   including:
   - **Bacterial Filter**
   - **Secretion Bottle**
   - **Bottle Cap**
   - **Connecting Tube**, short
   - **Patient Tube**
   - **Overflow Case**
   - **Mains Cord**, length 300 cm

031457-10*  **Tubing Set**, for suction,
   sterile, for single use, package of 10,
   for use with KARL STORZ S-PILOT®

030306-04*  **Guardian Suction Canister**, 12 l,
   for single use, package of 4

030970-10*  **Tissue Trap Filter**, unsterile, for single use,
   package of 10, for use with Suction Canister
   030306-04 and other suction bottle systems

030381-01  **Guardian LVC Roll Stand**, for 1 canister, 12 l

** UNIMAT® 30 is not required when using the central suction system.
Optional Accessories

General

495 NAC  **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm

27218 LO  **REINER-ALEXANDER Syringe**, 150 ml

27224 LO  **ELLIK Evacuator**, with locking device “LO”

27050 LC  **Adaptor**, for use with bladder syringes in outer sheaths of Resectoscopes 27050 SC/SD and 27054 SC
Steri-Trays...

...for Instruments

39301 H Plastic Container, for sterilization and storage, perforated, with transparent lid, with silicone mat, external dimensions (w x d x h): 515 x 237 x 64 mm including:
- Base
- Lid
- Silicone Mat

39502 Z Metal Wire Tray, for cleaning, sterilization and storage of instruments, stackable, including hole plate walls and foldaway handles, external dimensions (w x d x h): 480 x 250 x 66 mm

...for Standard Telescopes

39301 BS Plastic Container, for sterilization, especially suited for hydrogen peroxide (Sterrad®) sterilization and storage, perforated, with lid, for use with two rigid endoscopes up to max. 32 cm working length, external dimensions (w x d x h): 446 x 90 x 45 mm

39501 B1 Metal Wire Tray, for cleaning, sterilization and storage of instruments, of one rigid endoscope, including holder for light post adaptors, silicone telescope holders and lid, external dimensions (w x d x h): 430 x 65 x 52 mm, for rigid endoscopes up to diameter 10 mm and working length 34 cm

...for Angled Telescopes

39314 G Plastic Container, for sterilization and storage, perforated, with transparent lid, external dimensions (w x d x h): 515 x 240 x 84 mm, for two angled telescopes of up to 10 mm

39501 U Metal Wire Tray, for sterilization and storage of telescopes, with lid, tray for small parts and silicone telescope holder, external dimensions (w x d x h): 510 mm x 185 mm x 82 mm, for angled telescopes and uretero-renoscopes up to working length 34 cm
It is recommended to check the suitability of the product for the intended procedure prior to use.