HPS – HIP PORTAL SYSTEM

Michael Dienst, M.D.,
Homburg/Saar, Germany

including DVD
“HIP ARTHROSCOPY”
HPS – HIP PORTAL SYSTEM
Michael Dienst, M.D., Homburg/Saar, Germany

Introduction

The interest of orthopaedic and traumatic surgeons in hip arthroscopy has increased over the last few years. Until recently, arthroscopic surgery of the hip joint was limited to diagnostic procedures and resection of loose debris, labrum and cartilage smoothing, and synovectomy. Today, new techniques for reconstructive cartilage repair, such as microfracturing and abrasion arthroplasty, for refixation of the acetabular labrum and for recontouring the femoral head-and-neck junction are performed arthroscopically.

The anatomical characteristics of the hip joint make portal placement relatively difficult. Furthermore, flexibility of the arthroscope and surgical instruments required is limited.

To optimize and simplify hip arthroscopy, KARL STORZ collaborated closely with Dr. Michael Dienst, supported by Dr. Andreas Weiler, to develop a special system for performing arthroscopic procedures involving the hip joint.

The KARL STORZ system is the ideal synthesis of a cannulated system and special hand instruments. It provides a complete solution to enable surgeons to perform the most common hip arthroscopies.

Advantages

- Precise portal placement using a cannulated system and aiming device
- Versatile solutions for portal management, such as:
  a. Stable portals and secure fluid management
  b. Half Pipe® provides better flexibility and allows rapid instrument exchanges
  c. Portal-free instrument use for maximum instrument mobility
- Increased working length of arthroscopy sheath and instruments
- Simplified instrument changes
Special features

- Special high-flow sheath for hip arthroscopy, with a diameter of 5.5 and 6.0 mm, and 13.5 cm working length.
- A fast, stable and reliable arthroscope and sheath connection.
- Fully cannulated system.
- Half Pipe®s designed for hip arthroscopy that enable faster instrument changes and provide more flexibility for operating instruments.
- Cannulated and extra-long shaver blades.
- Burr adapted for axial applications.
Key Instruments and their Features

1. Arthroscope sheath with quick snap-in coupling mechanism
   - The working length of the sheath was increased by locating the rotatable stopcocks further back on the shaft. This helps to increase the working length for hip arthroscopy.
   - To simplify changes between arthroscope and instrument access, switching between the scope and sheath is performed using one quick snap-in coupling mechanism. Fast and easy handling of the coupling mechanism and its usability with a standard scope provide key benefits.
   - The modified design of the distal end allows optimal guidance of the arthroscope.
   - A new gasket adaptor ensures rapid closure of the sheath and modifies it to function as a working channel for inserting instruments.

2. Fully cannulated system
   The number of portals required for hip arthroscopy can require more frequent changes. The KARL STORZ cannulated system enables surgeons to perform quick instrument and access changes using a guidewire or switching stick.
   The system includes the following instruments:
   - Positioning needle and guidewire
   - Cannulated switching stick
   - Cannulated, reusable obturators with ergonomic handles
   - Transparent, threaded cannulas that can be reused up to 5 times, with a special screw thread to provide sufficient strength while protecting cartilage and labrum through a distal end without threads
   - Cannulated, extra-long and curved shaver blades

3. Aiming device
   Exact positioning of portals in relation to the hip joint is necessary for a complication-free surgery and determines the visibility and accessibility of intra-articular structures.
   To facilitate placement of portals, KARL STORZ worked in cooperation with Dr. Michael Dienst to develop an aiming device for hip arthroscopy.
   For surgeons, the aiming device facilitates triangulation within the joint and hastens identification of the correct position of the secondary and third portal.
   The aiming device is assembled directly onto one of the Luer lock connectors of the arthroscopy sheath. Feed, rotation and angle are adjustable in order to find the correct entry sites and needle directions for secondary portals.
4. Half Pipe®-Hip
With the Half Pipe®, KARL STORZ presents a completely new insertion aid to make instrument manipulation faster, safer and more tissue sparing. The half-open design simplifies insertion of instruments into the joint with less risk of labrum or cartilage damage, extends the radius of action and optimizes visual monitoring.
The Half Pipe® Hip is available in three versions, and is both reusable and autoclavable.

5. Shaver Blades
Motor-driven hand instruments are essential to performing operative hip arthroscopy. Because of the anatomical characteristics of the hip joint, extra-long cutting and burring shaver blades have been developed. These devices enable surgeons to work simply and efficiently in the hip joint.
The main feature of the cutting, straight and curved blades is a cannulated design that allows fast and atraumatic insertion, as well as blade changes using a guidewire.
All blades can be non-destructively disassembled into outer and inner blades for cleaning and removal of loose debris or soft tissue.
The sheath of the burr can be inserted over a cannulated switching stick. Because the position of the outer blade has been moved further back, axial burring is possible.

6. Hand instruments
The comprehensive hip set includes extra-long hooks, knife, punches, microfracture chisels and curettes.
Recommended Literature:


HPS-HIP PORTAL SYSTEM

Standard Basic Hip Set

Recommended Set acc. to Dr. Dienst

28140 A  Standard Basic Hip Set, consisting of:

1* 28731 BWA  Wide Angle Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable. Fiber optic light transmission incorporated. Color code: red

1x 28731 CWA  Wide Angle Lateral Telescope 70°, enlarged view, diameter 4 mm, length 18 cm, autoclavable. Fiber optic light transmission incorporated. Color code: yellow

2x 28140 GW  Guide Wire, diameter 1.5 mm, working length 400 mm

2 x 28140 DB  Spinal Needle, 2.1 mm diameter, for use with guide wire 28140 GW and Obturator 28140 DO, working length 213 mm

1 x 28140 W  Switching Stick, for use with the arthroscopy sheaths 28130 CR, R and 28131 CR and R, working length 310 mm

1x 28140 WK  Switching Stick, cannulated, for use with arthroscopy sheaths 28130 CR, R and 28131 CR and R as well as Guide Wire 28140 GW, working length 310 mm

* The figure in front of the article number is the recommended quantity
1x 28131 CR  **Arthroscopy Sheath**, diameter 5.5 mm, working length 13.5 cm with snap-in coupling mechanism, with two rotatable stopcocks, for use with **HOPKINS** telescope 0°, 30°, 45°, 70° and 90°, diameter related color code: blue, for use with obturators 28130 BC and BT

1x 28130 R  **High-Flow Arthroscopy Sheath**, diameter 6.0 mm, working length 13.5 cm, with snap-in coupling mechanism, with one rotatable stopcock, for use with **HOPKINS** telescope 0°, 30°, 45°, 70° and 90°, diameter related color code: red, for use with obturators 28130 BC and BT

1x 28131 R  **Arthroscopy Sheath** diameter 5.5 mm, working length 13.5 cm with snap-in coupling mechanism, with one rotatable stopcock, for use with **HOPKINS** telescope 0°, 30°, 45°, 70° and 90°, diameter related color code: blue, for use with obturators 28130 BC and BT

1x 28130 BC  **Obturator**, blunt, for use with Arthroscopy sheaths 28130 CR and R, 28131 CR and R, color code: green, red, yellow

2x 28140 D  **Gasket Attachment**, with cone, including gasket 28140 D, for use with all arthroscopy sheaths

4x 28140 GU  **Gasket**, disposable, non sterile, single packaged, for the use with gasket attachment 28140 D
1 x 28140 O  **Handle** with cannulated Obturator, for the use with arthroscopy sheaths 28130 CR, R and 28131 CR and R as well as the Guide Wire 28140 GW

1 x 28140 Z  **Aimer** for the use in hip arthroscopy for the portal placement, complete, consisting of:

- 28140 ZA  **Aimer**, with attachment for 28140 ZB/ZC
- 28140 ZB  **Bullet**, short, 105 mm
- 28140 ZC  **Bullet** long, 145 mm

1x 28140 HA  **Half Pipe®-Hip**, handle 90° rotated, Half Pipe handle axis 135°, working length 95 mm

1x 28140 HB  **Half Pipe®-Hip**, handle 90° rotated, Half Pipe handle axis 135°, working length 120 mm

1x 28140 GH  **Half Pipe®-Hip**, with extra slim distal design, working length 95 mm
1x 28140 T  **Hook and Retractor**, graduated, diameter 3.5 mm, length of hook 3 mm, working length 180 mm

1x 28140 TA  **Hook and Retractor**, graduated, 10° bent downwards, diameter 3.5 mm, length of hook 3 mm, working length 200 mm

1x 28140 TB  **Hook and Retractor**, graduated, 20° bent downwards, diameter 3.5 mm, length of hook 3 mm, working length 200 mm

1x 28140 TL  **Hook and Retractor**, graduated, diameter 3.5 mm, length of hook 3 mm, working length 215 mm

1x 28140 MG  **Knife**, curved, double edged, working length 180 mm

1 x 28146 M  **Knife**, curved, double edged, working length 115 mm
Additional Instruments for Surgery

1x 28140 S  **Evacuation Cannula**, with Luer-Lock and one stopcock, for use with arthroscopy sheaths 28130 CR, R and 28131 CR and R, working length 180 mm

1x 28140 EC  **Handle**, for the use with threaded cannula 28140 SB and obturator 28140 EP
1x 28140 EP  **Obturator**, cannulated, for use with handle 28140 EC
1x 28140 EB  **Handle**, for the use with threaded cannula 28140 SA and obturator 28140 EO
1x 28140 EO  **Obturator**, cannulated, for use with handle 28140 EB
1x 28140 FC  **Handle**, for use with the threaded cannula 28140 SD and obturator 28140 FP
1x 28140 FP  **Obturator**, cannulated, for use with handle 28140 FC
1x 28140 FB  **Handle**, for use with threaded cannula 28140 SC and obturator 28140 FO
1x 28140 FO  **Obturator**, cannulated, for use with handle 28140 FB
1x 28140 SA  **Threaded Cannula**, inner diameter 6.1 mm, working length 90 mm, for use with handle 28140 EB, transparent, limited reusable (5x), non sterile, single packaged

1x 28140 SB  **Threaded Cannula**, inner diameter 6.1 mm, working length 120 mm, for use with handle 28140 EC, transparent, limited reusable (5x), non sterile, single packaged

1x 28140 SC  **Threaded Cannula**, inner diameter 8.25 mm, working length 90 mm, for use with handle 28140 FB, transparent, limited reusable (5x), non sterile, single packaged

1x 28140 SD  **Threaded Cannula**, inner diameter 8.25 mm, working length 120 mm, for use with handle 28140 FC, transparent, limited reusable (5x), non sterile, single packaged

3x 28179 DG  **Housing**, for use with cannulas. To be used with the set of gaskets 28179 GS or 28179 GU. With Luer-Lock.

3x 28179 OG  **Housing** for use with cannulas. To be used with the set of gaskets 28179 GS or 28179 GU. Without Luer-Lock.

1x 28179 GU  **Set of gaskets**, 10 x 2 gaskets, non-sterile
2x 28728 G  **Handle**, only, for use with mirror attachments

1x 28140 MB  **Mirror**, 10° bent upwards, for the inspection of difficult accessible areas in the joint, working length 280 mm, for the use with 28728 G

1x 28140 MC  **Same**, 40° bent upwards

1x 28171 KG  **SilGrasp™ Grasper**, aggressive foreign body grasper, working length 20 cm

1x 28171 KP  **SilCut® Punch**, through-cutting, 15° up, cutting width 3.4 mm, working length 20 cm

1x 28171 KU  **Same**, bent in sheath 15° up

1x 28171 KGS  **SilGrasp™ Grasper**, aggressive foreign body grasper, with ratchet, working length 20 cm
1x 28140 KE  **Curette**, oval, small, both sides cutting, 20° curved upwards, working length 180 mm

1x 28140 CD  **Microfracture Chisel**, 30° bent, working length 180 mm

1x 28140 CE  **Same**, 70° bent

1x 533 TVA  **Adaptor**, autoclavable, facilitates changing of telescopes in sterile conditions
Accessories

287210 03-1  **Powershaver SL Basic Set with SCB**, consisting of the power unit 207210 20-1, power cord 400 A and footswitch 200128 31, SCB Connecting Cable 200901 70

287210 30  **Shaver High Speed Handpiece SL15K**, for use with KARL STORZ Powershaver-System SL

287210 35  **Shaver Handpiece SL 8K**, for use with KARL STORZ Powershaver-System SL
Shaver Blades

Working length 180 mm

- **28208 BKS**  
  Aggressive Cutter, with keyhole, disposable, sterile, box of 6, diameter 4.5 mm, working length 180 mm, for use with the Powershaver SL

- **28208 CCS**  
  Full Radius Resector, disposable, with keyhole, sterile, box of 6, diameter 4.5 mm, working length 180 mm, for use with Powershaver SL

- **28208 CDS**  
  Same, diameter 5.5 mm, working length 180 mm

- **28208 DCS**  
  Aggressive Full Radius Resector, with keyhole, disposable, sterile, box of 6, diameter 4.5 mm, working length 180 mm, for use with Powershaver SL

- **28208 EGS**  
  Curved Full Radius Resector, with distal Führungsbörung, distales Ende 15° aufwärts gebogen, einmal verwendbar, je 6 Stück, steril verpackt, Durchmesser 4,5 mm, Arbeitslänge 180 mm, zur Verwendung mit dem Powershaver SL

- **28208 EHS**  
  Curved Full Radius Resector, with keyhole, distal tip curved 15° upwards, disposable, sterile, box of 6, diameter 4.5 mm, working length 180 mm, for use with Powershaver SL

- **28208 IDS**  
  Semi Hooded Barrel Burr, disposable, sterile, box of 6, diameter 5.5 mm, working length 180 mm, for use with Powershaver SL

Working length 120 mm

- **28208 AKS**  
  Aggressive Cutter, with keyhole, disposable, sterile, box of 6, diameter 4.5 mm, working length 120 mm, for use with the Powershaver SL

- **28208 BKS**  
  Aggressive Cutter, with keyhole, disposable, sterile, box of 6, diameter 4.5 mm, working length 180 mm, for use with the Powershaver SL

- **28208 CKS**  
  Full Radius Resector, disposable, with keyhole, sterile, box of 6, diameter 4.5 mm, working length 120 mm, for use with the Powershaver SL
DVD is missing?
Please call KARL STORZ for your free copy.