Highlights 2017

2017 Edition, Quarter 1

Gynecology
Visualization of the lymphatic system with ICG in tumor surgery*

The KARL STORZ Near Infrared (NIR/ICG) system and the marker indocyanine green (ICG) enables non-radioactive visualization of the entire lymphatic system surrounding a tumor in real time, e.g., in a laparoscopic manner.

The system offers the following advantages:

- Non-radioactive lymph node detection method
- Multidisciplinary use
- Xenon-based technology (no laser safety measures necessary)
- Intuitive switchover between standard white light and fluorescence mode via footswitch
- Physicians describe their surgical experience with the system as follows: The NIR/ICG system allows the reduction of radical lymphadenectomy and, at the same time, visual control makes the en-bloc resection of lymph nodes easier.

* The intradermal administration of indocyanine green for (S)LN has already been approved in Italy (breast cancer), Japan and Russia. Please inform yourself in advance about the potential for the off-label use of ICG in your hospital / country.
Laparoscopic visualization of the lymphatic system in gynecology with the NIR/ICG system

In gynecology, the degree of tumor involvement in the sentinel lymph node (SLN) is of great importance as it provides medical information about the tumor stage and is thus one of the main prognostic factors. In breast cancer surgery, SLN detection with the radioactive tracer $^{99m}$Tc is the gold standard. In other areas of gynecological tumor surgery, its benefits in comparison to elective lymph node dissection is the subject of discussion. As a new, non-radioactive imaging technique, NIR imaging with ICG can provide a useful contribution to this field.\(^1\) Laparoscopic SLN mapping of endometrial carcinoma yielded the following results (radioactive tracer $^{99m}$Tc vs. ICG):

<table>
<thead>
<tr>
<th>Study 1(^2)</th>
<th>Radioactive Tracer $^{99m}$Tc</th>
<th>ICG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total SLN detection rate</td>
<td>Bilateral SLN</td>
</tr>
<tr>
<td></td>
<td>83%</td>
<td>61%</td>
</tr>
</tbody>
</table>

|                | Total SLN detection rate    | Bilateral SLN |
|                | 95.5%                       | 95.5%          |

\(^1\) Papadia et al., Doctor-to-Doctor Manual ENDO-PRESS\textsuperscript{®}, ICG-enhanced Fluorescence-guided SLN Mapping in Gynecological Malignancies (ISBN 978-3-89756-932-4)

\(^2\) Imboden et al., Surg. Oncol. 2015
VITOM® II ICG – Use for vulvar carcinoma

The VITOM® II ICG from KARL STORZ provides an optimal solution for the sentinel lymph node mapping in the case of vulvar carcinoma. VITOM® II ICG is an exoscope that combines the benefits of both endoscopy and microscopy. It is used with the same camera system that is employed in endoscopy (IMAGE1 S NIR system).

- NIR visualization with the VITOM® II ICG – in addition to technetium and blue dye – offers the surgeon a straightforward method for the detection and selective removal of sentinel lymph nodes (SLN) in the case of vulvar carcinoma.
- Possibility for the integration of an exoscope by means of a holding arm into the gynecologist’s operating field.
Camera System

Camera CCU

Light Source

Camera Head

Light Cable

Telescope

VITOM®

IMAGE1 S System

IMAGE1 S CONNECT™
TC 200

IMAGE1 S H3-LINK
TC 300

IMAGE 1 HUB™
System

ICG

D-LIGHT P 20 1337 01-1

IMAGE1 S

H3-Z FI
TH 102

Fiber Optic Light Cable
495 NAC/NCSC

HOPKINS® Telescope
26003 ACA/BCA
26046 ACA/BCA

VITOM® II ICG
20 9160 25 AGA
28272 CN/UGK/HC
28172 HM/HR
The New Trocar Generation from KARL STORZ

The new trocar generation combines single-use and reusable components. In line with the KARL STORZ company philosophy, the cannulas and trocars were designed with reusable components in mind. The valve seal is intended for single use.

Special Features:

- Ergonomic shape of the trocar ensures safe and comfortable handling during placement of the trocar
- One-piece sealing system for single use (package of 10)
- Minimal friction between the valve seal and the instrument
- Considerably reduced weight and good balance thanks to the newly designed plastic trocar housing
- Color coding for clear identification of different sizes
- Available in the sizes 2.5 mm – 13.5 mm
### Trocars

<table>
<thead>
<tr>
<th>Size</th>
<th>2.5 mm</th>
<th>3.5 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working length</td>
<td>5 cm</td>
<td>5 cm</td>
</tr>
<tr>
<td>Color code</td>
<td>blue</td>
<td>green</td>
</tr>
<tr>
<td>Trocar, with pyramidal tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>11603 GZS</td>
<td>30114 GZS</td>
</tr>
<tr>
<td>Trocar, with blunt conical tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>30114 GNS</td>
<td>30114 GNG</td>
</tr>
<tr>
<td>Trocar, with conical tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>30114 GYS</td>
<td>30114 GYG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>6 mm</th>
<th>11 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working length</td>
<td>5 cm</td>
<td>10 cm</td>
</tr>
<tr>
<td>Color code</td>
<td>black</td>
<td>black</td>
</tr>
<tr>
<td>Trocar, with pyramidal tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>30160 GZS</td>
<td>30160 GZG</td>
</tr>
<tr>
<td>Trocar, with blunt conical tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>30160 GNS</td>
<td>30160 GNG</td>
</tr>
<tr>
<td>Trocar, with conical tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>30160 GYS</td>
<td>30160 GYG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>13.5 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working length</td>
<td>10 cm</td>
</tr>
<tr>
<td>Color code</td>
<td>blue</td>
</tr>
<tr>
<td>Trocar, with pyramidal tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>30108 GZG</td>
</tr>
<tr>
<td>Trocar, with blunt conical tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>30108 GNG</td>
</tr>
<tr>
<td>Trocar, with conical tip including <strong>valve seal</strong>, for single use, package of 10</td>
<td>30108 GYG</td>
</tr>
</tbody>
</table>

### Valve Seals
For trocars size 2.5 mm  | 11603-XV2
For trocars size 3.5 mm  | 30114-XV3
For trocars size 6 mm    | 30160-XV5
For trocars size 11 mm   | 30103-XV10
For trocars size 13.5 mm | 30108-XV13

30141 RS  **Reducer**, 13.5/5 mm and 11/5 mm
SupraLoop – Bipolar Loop Now Available

For laparoscopic supracervical hysterectomy

In addition to the well-known SUPRALOOP unipolar loop, KARL STORZ now offers a bipolar SUPRALOOP for the removal of the uterus in supracervical hysterectomy.

- No neutral electrode necessary for the bipolar SUPRALOOP
- Loop available in two sizes
- Reduced operating time thanks to quick removal of the uterus
- Additional cost savings thanks to reusable handle and outer sheath
Bipolar SupraLoop

26183 N  **SUPRALOOP Set**, bipolar, size 5 mm, length 30 cm
consisting of:
26183 NA  **Handle**, with connector pin for bipolar coagulation, **autoclavable**
26183 MB  **Outer Sheath**, insulated, size 5 mm, length 30 cm
26183 NC  **Spare SUPRALOOP**, size 120 x 85 mm, unsterile, for single use

26183 ND  **Spare SUPRALOOP**, bipolar, size 200 x 150 mm, unsterile, for single use,
for use with Handle 26183 NA and Outer Sheath 26183 MB

Unipolar SupraLoop

26183 M  **BRUCKER/MESSROGLI SUPRALOOP**, complete, size 5 mm, length 30 cm,
consisting of:
26183 MA  **Handle**, with connector pin for unipolar coagulation, **autoclavable**
26183 MB  **Outer Sheath**, insulated, **autoclavable**, size 5 mm
26183 MC  **Spare SUPRALOOP**, size 120 x 85 mm, unsterile, for single use

26183 MD  **Spare SUPRALOOP**, size 200 x 150 mm, unsterile, for single use,
for use with Handle 26183 MA and Outer Sheath 26183 MB
The versatile KECKSTEIN uterine manipulator makes gynecological surgery in the lower pelvis easier and safer. Presentation of the operative field during hysterectomy as well as organ-preserving surgery, e.g. in the case of endometriosis, is greatly enhanced in comparison to conventional manipulators thanks to the possibility of anteflexion and retroflexion of the distal tip and cap. Various configurable atraumatic inserts for interventions in reproductive medicine or oncology offer the operating surgeon completely new surgical possibilities.

- New reusable seal for Total Laparoscopic Hysterectomy
- Anteflexion and retroflexion of the distal tip and the cap
- Atraumatic inserts for organ-preserving interventions and surgical oncology
26168 Z  KECKSTEIN Uterine Manipulator, complete including:
Handle
Manipulator Sheath
Cap, diameter 37 mm, length 30 mm
Cap, diameter 42 mm, length 30 mm
Spiral Insert, diameter 15 mm
Spiral Insert, diameter 20 mm
Working Insert, diameter 6 mm, length 60 mm
Working Insert, diameter 6 mm, length 40 mm
Seal
Working Insert, for chromopertubation, diameter 3 mm, length 30 mm
Working Insert, atraumatic, diameter 5 mm, length 60 mm
Tenaculum Forceps
Holder for Tenaculum Forceps
Pertubation Tube
2x Luer-Lock Connector
Y-Tube Connector

NEW

26168 ZT  Seal, for use with the caps of KECKSTEIN Uterine Manipulator 26168 ZC/ZD/ZE

Optional accessories:
26168 ZE  Cap, diameter 47 mm, length 30 mm
26168 ZF  Spiral Insert, diameter 12 mm
26168 ZK  Working Insert, diameter 6 mm, length 80 mm
26168 ZS  Working Insert, diameter 6 mm, length 30 mm
26168 ZN  Working Insert, for chromopertubation, diameter 3 mm, length 50 mm
26168 ZO  Working Insert, atraumatic, diameter 5 mm, length 40 mm
26168 ZR  Working Insert, atraumatic, diameter 5 mm, length 90 mm

It is recommended to check the suitability of the product for the intended procedure prior to use.