



Hemorrhoids

TRILOGY.

TRILOGY combines all the proven advantages of the HAL-RAR procedures with the flexibility of wireless technology.



Locate. Ligate. Lift.

For patients, HAL-RAR offers a safe and gentle alternative to conventional treatment methods that provides effective relief from all the symptoms of hemorrhoids, even in the more advanced stages. Artery ligation and mucopexy of prolapsing mucosa can be carried out in one procedure under local anesthetic, depending on the individual patient and the prevailing healthcare system.

For surgeons, TRILOGY gives you the benefit of Doppler-ultrasound technology with no cables attached. Literally, with a Bluetooth connection between the unit and speaker, you can hear the system's signals for precise, individual detection of hemorrhoidal arteries while enjoying absolute freedom to maneuver the unit and attached probe as required. In addition, the absence of a cable – which acts as an antenna for surrounding electromagnetic radiation – means the equipment is less sensitive to interference and the arteries can be heard more clearly than ever before.

Facts

- The Wi-3 HAL-RAR System enables precise detection of vessels (e.g. hemorrhoidal arteries) by means of Doppler ultrasound technology
- The Wi-3 HAL-RAR System is a wireless system (battery-driven) and has a Bluetooth technology
- Bright illumination of surgical area of interest inside the probes (due to three white LEDs)
- The Wi-3 Arm supports ergonomic handling of the Wi-3 HAL-RAR Unit in the rectum

Benefits [1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14], [15], [16]

- Improved Quality of Life and patients' satisfaction
- Low risk of peri-operative (short- and long-term postoperative) pain
- Less post-operative pain compared to hemorrhoidectomy
- Shorter recovery time compared to hemorrhoidectomy
- A minimally invasive surgery with a low risk of intra-operative complications which is suitable for ambulatory surgery
- The ligation window in the probe is adequate and enables a proper manual ligation of detected arteries
- An effective surgical method after failure of previous treatments

Indication of TRILOGY

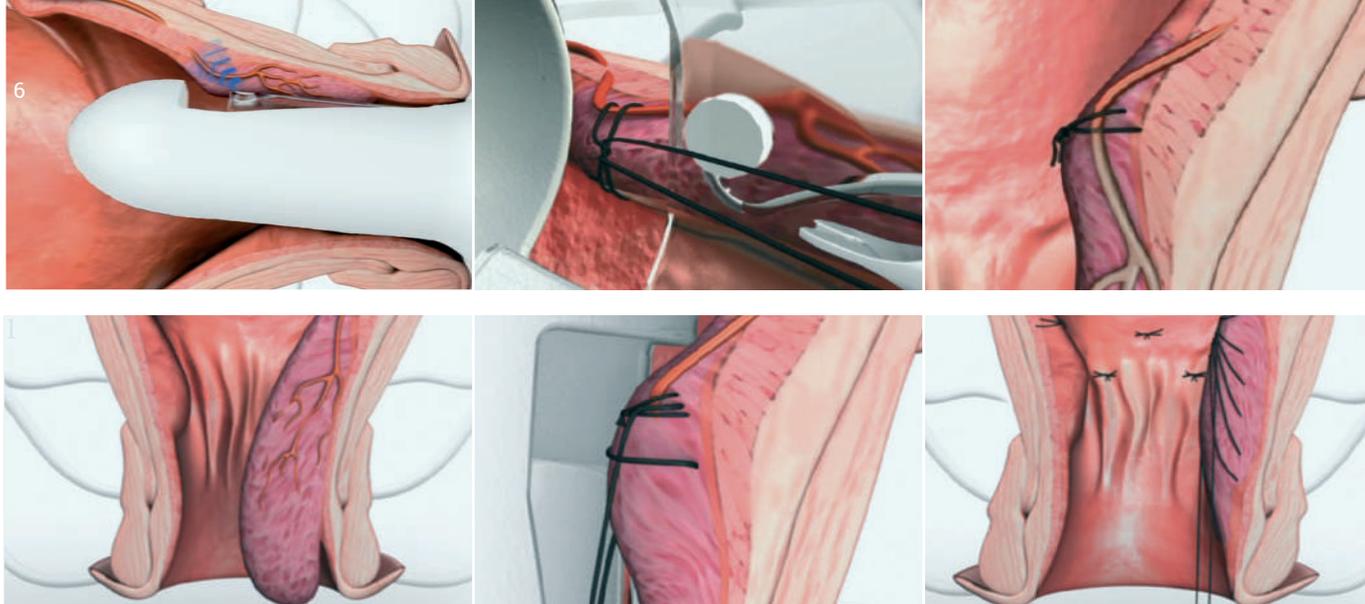
Surgical treatment of hemorrhoidal disease.



Animation video



Surgery video



HAL-RAR with TRILOGY

TRILOGY. **One device. All kinds of advantages.**

HAL (Hemorrhoidal Artery Ligation)

The HAL method is suitable for treating low to medium grade hemorrhoids, and is extremely effective in addressing the symptoms of hemorrhoidal disease. The ligations serve to reduce the arterial blood supply, causing the hemorrhoidal cushions to shrink back to normal size. This method can be carried out with ease using the TRILOGY Probe.

- 01** Attached to the TRILOGY Unit, the probe is introduced into the rectum and the unit with attached probe then rotated slowly to search for arteries. The loudest Doppler signal indicates the centre of the artery.
- 02** Once the first artery has been found, it is ligated using an A.M.I. Suture with 5/8 needle.
- 03** The unit is then turned again to locate further arteries. Once found, each artery is ligated as described in step 2.

"Modern surgical treatment of hemorrhoids should be guided by patient symptoms. It should treat these symptoms to the patient's satisfaction with low impact on the individual. DGHAL-RAR is safe, effective and well-tolerated. It reduces the need for potentially dangerous excisional procedures. Overall patient satisfaction following DGHAL-RAR was high..."

[11, p. 1255]

RAR (Recto Anal Repair)

The RAR method is used to treat the prolapsing hemorrhoids that occur during more advanced stages of the disease. RAR involves one or more mucopexies of prolapsing mucosa, carried out after the hemorrhoidal arteries have been ligated.

- 01** The TRILOGY Unit with attached probe is placed in the starting position as for ligation. The ligation window points towards the prolapse position requiring treatment.
- 02** An initial stitch is made as far proximal as possible. The unit and probe are then turned slightly to reveal more mucosa distally.
- 03** A running suture is started, and then continued with gradual turning of the unit, leaving 7 to 10 mm between each stitch. After the last stitch, which ends proximal of the Linea Dentata, the needle is cut off and the suture material knotted up near the initial stitch. This causes the prolapsing tissue to be pulled up towards the initial stitch, where it is then secured in place with a sliding knot.

"91.25% of patients would again ask for HAL treatment if necessary and 93.75% of patients would recommend HAL to a friend. The HAL procedure is synonymous with a high level of patient comfort..."

[17, p. 92]



Just two AA-batteries are required to power the small, handy TRILOGY Unit. After surgery, the batteries are removed before the unit is steam-autoclaved ready for the next use.

Why TRILOGY?

Comfort and convenience for the surgeon.

First came HAL, then there was RAR. Now there is TRILOGY.

The latest generation of HAL-RAR equipment incorporates state-of-the-art technology in a small, easy-to-handle device to give you the highest level of operating comfort. TRILOGY offers the ultimate in flexibility: the Bluetooth connection allows you to rotate and maneuver the unit into whatever position you require before suturing through the ligation window, all with the convenience of no bothersome cables.



The probe fits onto the unit and is secured with the fixation nut before being covered by the accompanying sleeve.



The unit is Bluetooth paired with the speaker for transmittal of the acoustic Doppler signals. Once paired, the devices only need to be switched on and will subsequently connect automatically.



During surgery, high-performance LEDs provide optimal illumination and a clear view of the site.