



Mucopexy – Recto Anal Lifting

Clinical Workshop Preparations

Key Considerations & Recommendations

Content has been excerpted from the MuRAL Clinical Applications Handbook by Pagano C. and Serfezi C. (© 2018)

Mucopexy – Recto Anal Lifting • Clinical Workshop Preparations – Key Considerations & Recommendations • 26 of July 2018

MuRAL Clinical Workshop

Logistics / Organization

MuRAL Clinical Workshop

Logistics / Organization

Half Day Session	MuRAL Introduction (meeting room / class room settings); duration \approx 1 hour.
	MuRAL Interventions: recommending to schedule 4 patients; time in OR \approx 3 hours. Interventions performed by host – under guidance of Dr. Claudio Pagano.
	Surgeons observing intervention: recommending to consider up to 4 observers / intervention.
	Debriefing / Q&A \approx 30 min.
Full Day Session	MuRAL Introduction (meeting room / class room settings); duration \approx 1 hour.
	MuRAL Interventions: recommending to schedule 6-8 patients; time in OR \approx 5-6 hours. Interventions performed by host – under guidance of Dr. Claudio Pagano.
	Surgeons observing intervention: recommending to consider up to 4 observers / intervention.
	Debriefing / Q&A \approx 1 hour.

Notification: the workshop agenda shall be provided to the organizers latest 1 week in advance of the date on which the event is scheduled.

MuRAL Clinical Workshop

Short Bios Organizers



Dr. Claudio Pagano

Educational Background	<ul style="list-style-type: none"> Medical Doctor, Medical School, University of Milan (Italy) Specialization General Surgery High Specialization in Coloproctology
Current Position	<ul style="list-style-type: none"> First Level Director General Surgery Unit, Vizzolo Predabissi Hospital, Melegnano – Milan (Italy)
Areas of Expertise	<ul style="list-style-type: none"> Laparoscopic and Robotic-assisted Surgery Video-assisted Thoracoscopic Surgery (VATS) Sacral Neuromodulation Testing & Pacemaker Implant Coloproctology <ul style="list-style-type: none"> Mucopexy – Recto Anal Lifting (MuRAL) Transanal Hemorrhoidal Dearterialization (THD) TranSTARR / STARR / PPH “Longo” / Milligan-Morgan Anal Fistula Repair Rectal Prolapse Repair
Lectureship	<ul style="list-style-type: none"> School of Specialization in General Surgery, Medical School, University of Milan (Italy) Medical School of Medicine University of Milan (Italy)
International Course Management	<ul style="list-style-type: none"> Mucopexy – Recto Anal Lifting (MuRAL) Transanal Hemorrhoidal Dearterialization (THD) Procedure for Prolapse and Hemorrhoids (PPH) ‘Longo Method’
Dissertations	<ul style="list-style-type: none"> <input type="checkbox"/> Surgery: “<i>The Surgery of Lung Cancer with Chest Wall Infiltration</i>” (2000) <input type="checkbox"/> Doctoral: “<i>Hepatic Resection for Primitive and Secondary Liver Pathology</i>” (1994)
Clinical Studies & Publications	<ul style="list-style-type: none"> <input type="checkbox"/> Coordination and collaborations: clinical studies (thoracic, visceral, coloproctology). <input type="checkbox"/> Author and co-author of numerous articles; complete list available on request.



Carmen Serfezi

Educational Background	<ul style="list-style-type: none"> MBA School of Management, University of Bradford (UK)
Current Positions	<ul style="list-style-type: none"> Senior Partner, The Mikan Group LLC (USA) Executive Director and Co-Owner, Bucatani Pte. Ltd. (Singapore) General Manager and Co-Owner, S&C Enterprises Ltd. (Cyprus)
Healthcare Industry Expertise	<ul style="list-style-type: none"> Healthcare Industry Executive for > 30 years Medical Imaging (x-Ray / CT / MRI); Coloproctology; OR Patient Positioning & Safety Business Development; Mergers & Acquisitions Distribution Network Management EMEA, Asia, Latin America Organizational & Operational Development of Healthcare Businesses Developed and Implemented Clinical Marketing Strategies Led Strategic Management, Business Development Projects for SMEs Established and Managed Operations in EU, China, Russian Federation and Japan
Professional Background	<ul style="list-style-type: none"> General Manager, Medrad MET Beijing Ltd. (China) Executive Director Global Distributor Network, Medrad Inc. (USA) Managing Director, Medrad Europe B.V. (The Netherlands) Director Sales & Marketing EMEA, Medrad Europe B.V. (The Netherlands)

Content has been excerpted from the MuRAL Clinical Applications Handbook by Pagano C. and Serfezi C. (© 2018)

Mucopexy – Recto Anal Lifting

Eligibility Matrix

Mucopexy – Recto Anal Lifting

Eligibility Matrix

Recommending to not select such complex cases for the workshop

Patient Affected by	Eligible
Prolapsed Hemorrhoids	Yes
Recurrent Prolapsed Hemorrhoids	Yes

Patient Affected by	Eligible
Prolapsed Hemorrhoids & Rectocele	Yes
Recurrent Prolapsed Hemorrhoids & Rectocele	Yes

Patient Affected by Multiple Conditions	Eligible <i>Managing Conditions during one Intervention</i>
Sphincter Hypertonia & Prolapsed Hemorrhoids	Step 1: resolve sphincter hypertonia Step 2: MuRAL
Prolapsed Hemorrhoids & Anal Fissure	Step 1: MuRAL Step 2: resolve anal fissure

Patient Affected by Multiple Conditions	Conditionally Eligible
Prolapsed Hemorrhoids & Pelvic Floor Incoordination Dysfunction	PFID has to be resolved before considering MuRAL
Prolapsed Hemorrhoids & Cystocele	Treatment protocol to include MuRAL complementary to resolving Cystocele
Prolapsed Hemorrhoids & Pelvic Organ Prolapse (POP)	Resolving POP followed by MuRAL (same intervention or in 2 steps)

Patient Affected by	Not Eligible
Prolapsed Hemorrhoids & Rectal Fistula	Rectal fistula has to be resolved before considering MuRAL
Recurrent Prolapsed Hemorrhoids & Abscess	Abscess has to be resolved before considering MuRAL

MuRAL Procedure Management

Preoperative

Procedure Management (Preoperative)

Patient Related

Adjust Medication & Diet	<p>Depends on patient's condition; adjusting medication & diet might be required several days before the intervention.</p> <p>Patients to stop treatment of hemorrhoids with STEROID based creams several weeks before the intervention.</p> <p>Recommending treatment with Bioflavonoids for 2 weeks prior the intervention.</p>
Bowel Cleansing	<p>Educate patients to not take LAXATIVE before the intervention.</p>
	<p>ENEMA – STONGLY RECOMMENDED morning before surgery.</p>
Antibiotic Prophylaxis	<p>RECOMMENDED Determined by surgeon during preoperative assessment.</p>
Anesthesia Choices	<p>GENERAL ANESTHESIA OF SHORT DURATION (i.e. Propofol & Oxygen Mask).</p>
	<p>SPINAL ANESTHESIA with HYPERBARIC PRILOCAINE (L2-L4) Hyperbaric Prilocaine provides a fast spinal block onset; patient recovers faster due to an accelerated spinal block regression; low incidence of transient neurologic symptoms (TNS); additional information on the subject is outlined in the background info section.</p>
Positioning on OR table	<p>LITHOTOMY position recommended (facilitates the natural descent of the prolapse).</p>

Procedure Management (Preoperative)

Procedure Essentials

HemorPex System® Plus (apply lubricant prior to utilization)	1 unit
Slowly absorbable braided PGA suture 0 USP 3.5 EP – 26mm (or 27 mm) 5/8c	6 units (male patient) 7 units (female patient with rectocele) USE NEW SUTURE AT EACH LOCATION
Wax coated braided silk suture #1 C – 17 cutting 3/8 ▼ 39mm	1 unit (fixation of HPS® Plus)
Fenestrated drape: (122x152cm Fen 12x15cm)	1 unit
Scissor: (Mayo straight 14 cm)	1 unit
Needle holder: (Mayo-Hegar 20cm with TC tips)	1 unit
Forceps Debaquey (18cm 7.2")	1 unit
Gauze 10x10cm	10 units
Antiseptic solution	Preoperative skin preparation

Mucopexy – Recto Anal Lifting

Background Information

Mucopexy – Recto Anal Lifting

Spinal Anesthesia with Hyperbaric Prilocaine

Spinal anesthesia should be performed at L2-L4 intervertebral space, which is the most appropriate level to provide good coverage to the recto anal area.

Background Info

- There are a series of drug combinations that can be used for spinal anesthesia; unfortunately there are some challenges associated with spinal anesthesia but they are still less problematic versus exposing patients to general anesthesia.
- Patients receiving spinal anesthesia for surgeries of longer duration can be affected by prolonged sensory & motor block and urinary retention, which can cause a delay in discharge.
- MuRAL is an intervention of short duration and the aim is to avoid prolonged sensory & motor block as well as urinary retention.
- Advantages of spinal anesthesia with hyperbaric Prilocaine:
 - ❑ It provides a fast spinal block onset - baricity of the anesthetic agent is the main factor influencing the distribution of the agent in the subarachnoid space.
 - ❑ Patient recovers faster due to the accelerated spinal block regression.
 - ❑ Low incidence of transient neurologic symptoms (TNS).

Mucopexy – Recto Anal Lifting

Factors Influencing Stability of Suture

➤ **Type of Thread:**

- Slowly absorbable braided Polyglycolic Acid coated suture.
- Maintain maximal strength at least 60 days.

➤ **Suturing Technique:**

- Distance between sutures preferable between 2-4mm; should not exceed 5mm.
- Mucosa & sub-mucosa grabbed with each needle passage should not exceed 1 cm.
- Total number of passages depends on the size of the prolapse (MuRAL – applied only to the inflamed mucosa).
- Formation of fibrosis and scar retraction will enable the lifting effect and anchor permanently the mucosa and sub-mucosa to the muscular wall beneath.
- The selective approach in performing MuRAL will not be negatively affected by the dynamics of the rectum because the procedure:
 - Has a 360° scope.
 - Takes advantage of the anatomic architecture.
 - Provides a solid foundation for the development of a fibrosis basket, which maintains the permanent lifting through multi-dimensional stability.

Confidentiality & Disclaimer Notice

Confidentiality & Disclaimer Notice

Content of the slide deck is intended for informational purposes only.

The information contained in this presentation is for the exclusive use of Kha Bangkok Co. Ltd. and selected Key Opinion Leaders whom desire to organize at their clinic a MuRAL Clinical Workshop.

Procedures must be performed by a physician specialized in colorectal surgery after determining if the patient's condition meets all requirements associated with the procedure and the delivery of medical services is performed in compliance with the local legislation & regulations.

The organizers cannot be held responsible for any damage, including consequential and indirect damage, deriving from, or in any way connected to the use of the information outlined in this presentation.