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IMPA NEWS

THE OFFICIAL NEWS LETTER OF THE INDEPENDENT MEDICAL PRACTITIONERS ASSOCIATION

FROM THE **PEN OF THE PRESIDENT. . .**

A successful medical update programme was held on Sunday 27th February 2022 at the Durdans Hospital Auditorium on "Micro Vascular Decompression is the best treatment choice" (MVD) by Dr. Jayantha Liyanage, MS, FRCS, Consultant Neuro Surgeon and "Laparoscopy in general surgery" by Dr. Sajith Ranatunga MD, MRCS, Consultant General & Colorectal Surgeon.

An excellent presentation of the Private Health Sector Development (PHSD) and Private Health Services Regulatory Council (PHSRC) Act was delivered at the IMPA council meeting held on 27th February 2022 by Dr. Kanthi Ariyaratne (Former Director/PSCD and Secretary/PHSRC)

I wish to inform all members that I the President of the IMPA has been appointed as a stake holder for the National programme for Tuberculosis Control and Chest Diseases (NPTCCD) headed by Dr. Lakshmi C. Somathunga, Additional Secretary (Public Health Services), Ministry of Health for which meetings will be held biannually.

The Certificate course in COPD and Asthma (CCCA) conducted by the Primary Care Respiratory Group of Sri Lanka (PCRG) in collaboration with the Public Health Foundation of India (PHFI) has been recommended & recognized by the Ministry of Health of Sri Lanka.

The IMPA membership is reminded to browse the revamped IMPA website (impasl.com) which is also linked to the Sri Lanka Drug Index (DIMPA).

The OPA organized a very successful meeting with the leader of the opposition on Friday 11th March 2022 at 6.00 pm to discuss the current crisis in the country and ideas of how to it could be mitigated. The Editor of the OPA Prof. Indika Karunaratne, Past President of the SLMA has requested submission of articles of importance. A meeting of Presidents of all 52 association members of the OPA was held on Tuesday 15th March 2022.

Dr A H A Hazari
President IMPA

Editor - Dr A L P de S Seneviratne

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EDITOR'S COLUMN

I wish to thank our members for sending articles for publication in the IMPA newsletter. I hope this will continue and will receive more and more articles for publication.

ENHANCED RECOVERY AFTER COLORECTAL SURGERY - A REVIEW OF CURRENT GUIDELINES AND EVIDENCE

Lakmal M.A.C.[1], Varun S.[2], Weerasekara D.[2], Sanjeewa S.H.R.[3], Gamage B.D.[2]

Introduction

Enhanced Recovery after Surgery (ERAS) is an evidence-based practice that aims to reduce peri-operative surgical stress response, maintain optimal physiological function thus improving recovery pathways and patient outcome. This has been increasingly adapted in several surgical sub-specialties like for in hepato-biliary, orthopedics, gynecology and urology. It was first described by Henrik-Kehlet in 1997 (Kehlet, 1997) and used for elective surgeries. ERAS reduces the surgical stress response, which is evident both by observational and analytical studies. (Mari *et al*., 2016)

ERAS in colorectal surgery is well established. Curative colorectal surgeries are made possible by accurate pre-operative diagnosis and staging and with the advent of neo-adjuvant therapy in locally advanced rectal cancers. Adapting ERAS to such patients has been showed to reduce rates of total complications, mean hospital stay, anastomotic leak & Re-operation. (Fierens *et al*., 2016)

A Multi-Disciplinary Team (MDT) is needed to achieve Pre, Intra and Post-operative targets of ERAS.(Jung *et al*., 2017) Over the years the paradigm has shifted drastically with elements like shorter fasting times, opioid sparing analgesia,chemo-thromboprophylaxis; However practical challenges remain as a barrier in implementing such strategies in local setting .Introducing local guidelines is of paramount importance to effectively implement ERAS recommendations (Lam et al., 2021), especially in a resource limited setting. Comparing it with standard protocols (Carmichael *et al*., 2017) (Gustafsson *et al*., 2018) and continuous audit is also advised.

This article reviews key elements of ERAS for colorectal surgery that can be adapted to Sri Lankan setting. This is based on the guidelines of ERAS society, American Society of Colon and Rectal Surgeons and Society of American Gastrointestinal and Endoscopic Surgeons.

Diagnosis and Staging of Colon and Rectal carcinoma

Histological diagnosis with colonoscopy and biopsy is mandatory. Colonoscopy should be performed to detect synchronous lesions (2-10%) (Isler *et al*., 1987) in all patients with colorectal carcinoma. In obstructed lesions where scope cannot be negotiated proximally, CT colonogram should be performed. (Zubaidi *et al*., 2020) MRI pelvis should be performed

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in all patients with rectal cancers to accurately assess the local invasion. Reporting of rectal MRI should be done according to standard rectal MRI protocols. Rectal endoscopic ultra sound would be considered if there are contraindications for MRI.

CECT Abdomen and Pelvis for all colon cancers CECT Abdomen for all rectal cancers to assess the hematogenous spread is recommended. CECT chest and Chest X-Ray can be used in selected cases. Baseline pre-operative CEA (Carcinoembryonic Antigen) value should be obtained.

After thorough work-up a colorectal MDT with a Surgeon (Preferably two or more), Oncologist, Pathologist, Radiologist, Stoma care nurse and other stakeholders depending on the case is recommended to decide on management pathways. In case of a rectal carcinoma, need of neo-adjuvant therapy should be decided at MDT.

Enhanced Recovery after Colorectal Surgery (ERAS) protocol

"ERAS Team" should include ,a surgeon, anesthetist, ward staff, theatre staff, stoma care nurse and nutritionist. Everybody should have clear understanding of his or her role and drafting a unit protocol should be considered. Utilizing a check list to evaluate the protocol is recommended. Minimally invasive (Pache *et al*., 2017) surgical approach is recommended whenever the expertise is available.

Preoperative measures

1. Pre-admission counseling–
    a. Thorough discussion regarding surgery and their concerns should be conducted with the patient and family.
    b. Written patient advice leaflets in local language would be beneficial in-patient education
    c. Meeting with stoma care nurse - Possible candidates of stoma creation should receive the care of a stoma care nurse, ideally before surgery.
2. Tri-modal Prehabilitation, addressing the nutrition, exercise tolerance and psychological status of the patient should be done. Serum albumin level of >3.5g/l should be the target.
3. Comorbidities like diabetes mellitus, Hypertension, asthma should be controlled before elective surgery and antiplatelet therapy should be tailored according to indication.
4. Patient admission - Admission of the patient a day prior to the surgery is suggested.
5. Preoperative fasting and bowel preparation -
    a. Fasting for solids 6 hours and clear fluids for 2 hours would be enough. (Andres and Karin, 2017) Intake of oral clear liquids up to 2 hours of the surgery should be encouraged.
    b. Carbohydrate loading should be given before surgery in non-diabetic patients.
    c. There are controversies on need of bowel preparation. For left colonic and rectal surgeries, phosphate enema early in the morning of the day of surgery can be recommended. (Cao, Li and Li, 2011) If full bowel preparation is required, antibiotic containing preparations should be used.
6. DVT prophylaxis should be started day before the surgery date. Sub cutaneous enoxaparin prophylaxis dose (0.5 mg/kg) can be given at 6pm of evening of prior day of the surgery.(Bergqvist, 2006)

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Perioperative measures

1. A bundle of measures should be in place to reduce surgical site infection **(Table 1)**

Table 1. Surgical Site Infection prevention bundle

Preoperative measures

- Nutritional optimization
- Cessation of smoking
- Chlorhexidine shower
- Prophylactic antibiotics before the incision

Operative measures

- Surgical site decontamination with chlorhexidine or povidone iodine
- Glows change before fascial closure
- Meticulous surgical technique
- Limited operative room crowd
- Avoid fluid overload
- Maintain normothermia

Postoperative measures

- Normoglycaemia
- Nutritional optimization

2. Pain control
    a. Pain management should be started preoperatively and patients concerns should be addressed properly.
    b. A multimodal, opioid-sparing, pain management plan should be used and implemented before induction of anesthesia. (Lohsiriwat, 2016)
    c. Thoracic epidural analgesia is recommended for open colorectal surgery and it is not recommended in laparoscopy.
    d. Use of Transversus Abdominis Plane block (TAP block) or surgical site infiltration should be encouraged.

Thoracic epidural analgesia is no longer recommended after laparoscopic surgery because it could potentially delay ambulation and hospital discharge without providing any additional benefit in pain control

3. Postoperative nausea and vomiting prevention
    a. Preemptive, multimodal antiemetic prophylaxis should be used.
        - Dexamethasone 8mg at induction can be used
4. Intraoperative fluid management
    a. Cardiac output monitoring is not available in most centers of Sri Lanka and if the facility is available goal directed fluid therapy is recommended.
    b. CVP guided fluid administration can be used taking adequate precautions to prevent fluid over load.
5. Temperature regulation
    a. Use of body warmers during surgery are recommended
6. Use of drains
    a. Routine use of drains are discouraged
    b. Selective use of drains are suggested.
7. Use of nasogastric drains
    a. Nasogastric tubes can be used to decompress the stomach during the surgery and removal in immediate postoperative period is suggested, if it is not indicate postoperatively.
8. Use of urinary catheter
    a. Urinary catheters are recommended to monitor urine output and should be removed at earliest in postoperative period.

Postoperative interventions

1. Early patient mobilization
    a. Patient should be seated on the bed at the

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same day of the surgery and progressive mobilization is recommended from next day.

b. Patients should be regularly encouraged on mobilization.

2. Early postoperative feeding
   a. Clear fluids can be started after patient gains full recovery of general anesthesia.
   b. Normal diet should be started at earliest.
   c. Patients should be encouraged on regular diet.
3. Intravenous fluid should be gradually tailored off and omitted early, once oral feeding is established.
4. Opioid analgesia should be avoided.
5. Early removal of urinary catheter is recommended. (24-48 hours)
6. Drains if used should be evaluated regularly and earliest removal is recommended.
7. Early discharge
   - The aim should be discharging the patient around postoperative day 05
   - Patient should be tolerating oral feeding, pain free and the surgical site should be healthy at discharge

Discussion and conclusion

It is important to adapt latest scientific measures to local guidelines, to minimize peri operative adverse effects and reduce hospital stay. though it has shown to improve overall patient care, there are several barriers: lack of funding, shortage of minimally invasive facilities and expertise, feasibility of MDT in our setting, variation in protocols of surgical units, lack of uniform consensus. But overall desirable outcome will mostly depend on the team work of all the care group health professionals. With the given facilities we believe it is not an unrealistic task to establish this practice in surgical centers at most parts of Sri Lanka.

Table 2. Current recommendation in USA and ERAS Society summarized

	USA	ERAS Society
Minimally Invasive Surgery(MIS)	Yes(1A)	Yes(1A)
Pre-operative counselling	Yes (1C)	Yes (1B)
Shorter fasting	Yes(1A)	Yes(1A)
Carbohydrate loading	Yes(2B)	Yes(1A)
Mechanical bowel preparation (MBP) with Oral antibiotics	Yes(2B)	Yes (1A)
SSI prevention bundle	Yes (2B)	Yes(1A)
Trimodal Prehabilitation (Nutrition, Exercise tolerance & Psychology)	Yes (2B)	Yes(2C)
Opioid sparing	Yes (1B)	Yes(1B)
Thoracic epidural	Yes for Open No for MIS (1B)	Selected Cases (1B)
Goal Directed Fluid therapy (GDT)	Yes (1B)	Yes(1B)
Early and progressive mobilization	Yes (1A)	Yes(1B)
Early removal of urinary catheters & avoid drains	Yes (1B)	Yes(1A)

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*vs placebo in acute neck pain † Pain at rest in acute neck pain

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