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"CLINICAL PRACTICE GUIDELINES FOR THE MANAGEMENT OF COLORECTAL CANCER. A CONSENSUS STATEMENT BY THE SOCIETY OF SURGEONS® AND SURGICAL ONCOLOGY SOCIETY OF PAKISTAN®."

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"CLINICAL PRACTICE GUIDELINES FOR THE MANAGEMENT OF COLORECTAL CANCER, A CONSENSUS STATEMENT BY THE SOCIETY OF SURGEONS® AND SURGICAL ONCOLOGY SOCIETY OF PAKISTAN®"

Awais Amjad Malik, Muhammad Farooq Afzal, Haroon Javaid Majid, Aamir Ali Syed, Shahid Khattak, Yar Muhammad, Abdulrehman, Osama Shakeel, Imran Khokhar, Ahmad Uzair Qureshi, Ahmed Farooq, Rehan Abdullah, Abul Fazal Ali Khan, Tabinda Sadaf, Misbah Masood, Abubakar Shahid, Raza Hasnain Sayyed, Abid Jamal, Sadaf Khan, Muhammad Arshad Cheema

Endorsed by:

"Society of Surgeons of Pakistan, Lahore Chapter"

"Surgical Oncology Society of Pakistan (SOS-PK)"

FOREWORD

DR. AWAIS AMJAD MALIK

CORRESPONDING AUTHOR

Colorectal Cancer is on the rise in Pakistan. With the constraint in resources the treatment offered to these patients is varied across various institutes and is far from standard. There are various factors cited for this difference with a most common blame on lack of adequate resources. However this variation or lack of adherence to standard treatment cannot be entirely blamed on lack of resources and has more to do with lack of training and lack of regulations.

As such there is a need to establish clinical practice guidelines for our own practicing physicians and surgeons. Although there are international guideline such as those given by the NCCN and ESMO but these cannot be universally applied across all the setups in the country. There are a lot of variations in what is available where. The main purpose of these guidelines is to provide a frame work for a minimum level of care that must be provided to every patient with colorectal cancer keeping in view our own circumstances.

With these targets in mind a basic core committee was established for the establishment of these guidelines. Experts from all the major hospitals in Lahore in the fields of surgery and oncology gathered in Lahore General Hospital. The clinical practice guidelines were developed after several meetings and discussions among the core committee members.

The committee then extended these guidelines to another panel of clinical experts all over the country. After undergoing various changes the final guidelines are being presented here. It is emphasised that the choices described in this document are evidence based, clinically approved and are consistent with the already existing international guidelines.

With these guidelines we hope to reach out to our surgeons across all the districts in Pakistan and provide a frame work for management of patients with colorectal cancers. I am thankful to all the experts who spared their valuable time to contribute in the development of these guidelines.

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Fellowship Surgical Oncology (Shaukat Khanum Memorial Cancer Hospital)
Surgical Oncologist
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FOREWORD

PROF. MUHAMMAD FAROOQ AFZAL

PRESIDENT, SOCIETY OF SURGEONS OF PAKISTAN, LAHORE CHAPTER

Colorectal Cancer is the third commonest cancer in both genders and also one of the third leading causes of death worldwide. Moreover, it is seen in the younger population in more aggressive form and is therefore becoming a major public health issue along with breast cancer in Pakistan. There has been a lot of progress made in the last few decades in the management of the colorectal cancer due to better imaging, availability of genomic testing and better local and systemic treatments. Surgery still remains as one of the cornerstones of the management of all stages of Colorectal cancer.

The advancements in laparoscopic and robotic surgery has made a great impact on the hospital stay and wound related morbidities of such patients with equal oncological outcomes. Unfortunately, we do not have enough information about the prevalence of the colorectal cancer and its outcome based on local research. Therefore, we rely on international guidelines which are derived from studies based on the western population that might be different from our population due to physical characteristics as well as diagnostic and therapeutic resources.

As the President of the society of surgeons of Pakistan Lahore chapter, it gives me great pleasure to share, that we took the initiative for developing guidelines in common surgical problems so as to standardized local practices and guide the local surgeons about the practical but evidence based management of surgical problems keeping in mind the local resources. Guidelines about the colorectal cancer is one the five guidelines developed by the society in 2020. We utilized international guidelines and data for developing our guidelines but when there was question of non-availability of local data or resources, we utilized expert panel consensus.

This is a fluid document and we hope to update it every five years based on new information. I am grateful to all the experts who spared their valuable time to contribute in this document. I pray and hope that all the surgeons will take help from these guidelines and hence the care of the patients with colorectal cancer will be impacted.

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Lahore General Hospital, Lahore.
President, Society of Surgeons of Pakistan, Lahore Chapter
Senior Vice President, Surgical Oncology Society of Pakistan (SOS-Pk)

FOREWORD

PROF. HAROON JAVAID MAJID

PRESIDENT, SURGICAL ONCOLOGY SOCIETY OF PAKISTAN

It gives me enormous pride to present the collaborative work of 'The Society of Surgeons of Pakistan, Lahore Chapter' and 'The Surgical Oncology Society of Pakistan'. I congratulate the committee on the publication of the first edition of our local National Clinical Practice Guidelines for the management of colorectal cancers.

The standard treatment guidelines have been developed after several meetings and discussions among the core committee members and expert clinicians. These guidelines include material from many sources as well as recommendations and advice from numerous leading experts in the field.

The care of colorectal cancer patients offered in our country is different at different places. With some institutes offering state of the art treatment others are not even to close what may be considered a bare minimum. With these guidelines we hope to standardise the care of colorectal cancer patients in our country.

I extend my sincere thanks to all members from various specialities who have contributed as members, subject experts and provided technical and editorial expertise. Without their dedication and tireless benchwork, it might not have been possible to bring out this publication.

Once again, I express my heartfelt gratitude to the generous support given by each and every one of our team in helping this historic initiative bear fruit. We hope to continue working on further improvements of these guidelines as dictated by the local circumstances.

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President, Surgical Oncology Society of Pakistan (SOS-Pk)
Former Vice President, Society of Surgeons of Pakistan, Lahore Chapter

GUIDELINES

"Clinical Practice Guidelines For The Management Of Colorectal Cancer, A Consensus Statement By The Society Of Surgeons® And Surgical Oncology Society Of Pakistan®"

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Endorsed by: "Society of Surgeons of Pakistan, Lahore Chapter" & "Surgical Oncology Society of Pakistan (SOS-PK)"

Abstract

A joint effort by the Society of Surgeons Pakistan and Society of Surgical Oncology Pakistan, these guidelines provide a framework for the practicing surgeons involved in care and management of patients with colorectal cancer. The guidelines take into account the issues related to our local circumstances and provide a minimum standard of care that must be given to these patients. The Guideline Committee had members from all disciplines, including surgery, surgical oncology, medical oncology and radiation oncology. The guidelines have attempted to simplify things to understand and follow for the practicing surgeons. With these guidelines we wish to eliminate disparities in treatment among institutions and prevent any under treatment of patients.

Keywords: Colorectal Cancer, Management, Surgery, Radiotherapy, Chemotherapy, Colorectal guidelines, Colon cancer, Rectal Cancer, Safe Practice Guidelines, Lower and Middle Income Country (LMIC).

Introduction

Colorectal cancer (CRC) is the third most common cancer in men and women.[1] The management of colorectal cancers should be done according to standard guidelines to have uniformity of care.[2] Guidelines have been put forward by various societies and panel of experts such as National Comprehensive Cancer Network (NCCN)[3] or European Society of Medical Oncology (ESMO).[4,5] However our local circumstances make it difficult to strictly follow these guidelines. There are several reasons for this including lack of infrastructure, lack of training and lack of finances. This has had a bad impact on the care and management of colorectal cancer patients. Compromising on staging, omitting neoadjuvant or adjuvant treatments, suboptimal surgeries all add to worse outcomes for our patients.

The society of surgeons Lahore undertook the task of establishing clinical practice guidelines for colorectal cancer and joined hands with the Surgical Oncology Society of Pakistan for developing local guidelines for the practicing surgeons. The Guideline Committee was organized by members with a diverse range of disciplines, including surgery, surgical oncology, medical oncology and radiation oncology. Each recommendation made was not on an individual basis but based on voting by the whole committee members.

The purpose of these guidelines is to show the standard treatment strategies for colorectal cancer and to define the minimum requirements needed for the management of these patients. With these guidelines we wish to eliminate disparities among institutions in terms of treatment and prevent any under treatment of patients. The committee first met in Feb 2020 and explored with the different areas needing attention or change in practice as far as Pakistan is concerned. The guidelines

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were changed multiple times before the final version was drafted. These are the recommendations put forward by the committee.

Colorectal Cancers

1. WORKUP

a. COLON CANCER

i. Biopsy

ii. Complete Blood Count (CBC), Carcino-Embryonic Antigen (CEA)

iii. Complete colonoscopy to rule out synchronous metastasis

iv. CT Chest abdomen and pelvis

1. CT scan is now available in every public sector hospital and should be a definitive part of preoprerative workup.

v. Evaluation by a stoma nurse (if not available the treating surgeon should take on that role) is desirable but not mandatory

b. RECTAL CANCER

i. Same as colon cancer

ii. MRI pelvis is preferred over CT pelvis

c. PET CT has no role in pre-op workup

d. If metastatic disease

1. Consider MMR MSI testing

2. Gene testing if available

2. REPORTING PROTOCOLS

The committee was of the opinion that there need to be standard reporting protocols for radiology and pathology across all centers as substandard reporting is a major cause of concern. Guidelines such as those issued by the American college of radiologists and American college of pathologists can be implemented as such or local protocols should be generated but there should be uniformity of reporting among institutes.

3. MULTIDISCIPLINARY TUMOUR BOARD (MDT)

a. All colorectal cancers should be discussed in an MDT comprising of atleast a gastroenterologist, surgeon, pathologist, radiologist, medical and radiation oncologist.

b. Unfortunately only a few hospitals have a dedicated oncology department and as such it is not possible to have an MDT discussion for every case. However a limited MDT with a gastroenterologist, surgeon, radiologist and pathologist should be carried out and an opinion can be sought from an oncologist on an individual basis before starting treatment.

4. TREATMENT (GENERAL CONSIDERATIONS)

a. Colorectal cancers should be preferably referred to tertiary care centers.

b. The committee was of the opinion that only those surgeons who have received special training should be dealing with colorectal cancers. A minimum number of 15 major resections per annum was suggested for a surgeon to be eligible for carrying out colorectal surgeries however this is still open to discussion.

c. Laparoscopic approach although desirable is not mandatory.

d. All colorectal centers should have a dedicated stoma nurse.

5. TREATMENT OF COLON CANCER

a. INITIAL ASSESSMENT:

i. RESECTABLE:

1. Colectomy with enbloc removal of regional lymph nodes

ii. RESECTABLE OBSTRUCTING:

1. Colectomy with enbloc removal of lymph nodes ± stoma OR

2. Diversion and referral to a dedicated center OR

3. Stenting followed by surgery

iii. T4b

1. Consider neoadjuvant treatment

b. ADJUVANT TREATMENT

i. Stage 1 - Observation

ii. Stage 2 low risk - Observation or chemotherapy

iii. Stage 2 High risk - Chemotherpay CapOX or FOLFOX (3-6 months)

iv. Stage 3 - Chemotherpay CapOX or FOLFOX (3-6 months)

c. METASTATIC DISEASE

i. Synchronous liver or lung metastasis (resectable)

1. Synchronous resection of primary and metastasis

followed by chemo OR

2. Neoadjuvant chemo followed by synchronous or staged resection OR

3. Colectomy followed by chemo followed by staged resection of metastasis

ii. Synchronous irresectable metastasis

1. Symptomatic (Obstruction, bleeding, perforation)

a. Colectomy followed by chemo - > reassess -> Resectable -> staged resection of metastasis

2. Asymptomatic

a. Systemic therapy -> Reassess -> Resectable -> Synchronous or stage resected

iii. Peritoneal disease

1. Systemic therapy

2. There is not enough evidence to recommend cytoreductive surgery and HIPEC for all cases.

3. A individualised case based decision needs to taken in an MDT

6. RECTAL CANCER

a. All tumours up to 15cm from anal verge should be treated as rectal cancers

b. VERY EARLY DISEASE

i. T1N0 - Transanal local excision if available

ii. T1-2 NO - Transabdominal excision

ADJUVANT TREATMENT

iii. pT1-2 N0 - Observation

iv. pT3 or Node positive - Adjuvant chemoradiation

c. T3-4 OR NODE POSITIVE

i. All T3 or node positive tumours should be offered primary systemic treatment before offering any surgical intervention.

ii. Upfront surgery for early T3 tumours without threatened margins although an acceptable option cannot be recommended as a standard of care for national guidelines.

Neoadjuvant Therapy

iii. Long course chemoradiation OR

iv. Total Neoadjuvant Therapy (TNT) OR

v. Induction chemo followed by long course chemoradiation OR

vi. Short course RT followed by 3-6 cycles of chemotherapy OR

vii. Short course RT immediately followed by surgery (within 2 weeks)

Restaging

viii. All patients to be restaged after completion of chemoradiation for assessment of response.

ix. Restaging to be done CT chest abdomen and MRI pelvis

x. Surgery should be offered atleast 6-12 weeks after completion of chemoradiation

xi. For patients receiving short course RT followed by chemotherapy surgery should be offered within 3 weeks of finishing last cycle of chemo.

xii. Response to staging

1. No response or disease progression - consider additional systemic therapy - Reassess for response

2. Partial response - Transabdominal resection

3. Complete clinical response - Transabdominal resection

(Watch and wait policy still lacks enough evidence to be a part of national guidelines. Can only be considered in the setting of a trial).

4. Staging laparoscopy before proceeding with definitive surgery should be considered in patients with high chances of peritoneal disease (young patients, signet cell pathology, hard/fixed tumours)

d. ADJUVANT TREATMENT

i. All patients to complete 6 months of perioperative chemotherapy if not already completed.

e. METASTATIC DISEASE

i. WORKUP

1. Consider MMR MSI testing

2. Gene testing if available

3. PET CT for selected cases

4. Consider diversion stoma or stent to relieve obstruction

ii. Synchronous liver or lung metastasis (resectable)

1. Neoadjuvant chemotherapy followed by short course

RT followed by synchronous or staged resection

iii. Synchronous irresectable metastasis

1. Systemic therapy -> Reassess -> Resectable -> Short course RT -> Synchronous or stage resection

iv. Peritoneal disease

1. Systemic therapy

2. There is not enough evidence to recommend cytoreductive surgery and HIPEC for all cases.

3. A individualised case based decision needs to taken in an MDT

7. SURVEILLANCE

a. Completion colonoscopy within 6 months of surgery if not done preoperative to rule out synchronous metastasis.

b. 3-6 month follow-up for the first 3 years then yearly with CEA and history and physical examination at each visit.

c. CT every 12 months for 5 years.

d. Colonoscopy at year 1, 3 and 5.

e. If CEA raised at any time or any abnormality in CT or colonoscopy detected then get a complete workup including colonoscopy, CT scan (consider PET CT if rest of the tests are clear) to localize the disease and treat accordingly.

Conclusion

The guidelines have attempted to simplify things to understand and follow for the practicing surgeons. The guidelines are endorsed by the "Society of Surgeons - Lahore Chapter" & "Surgical Oncology Society of Pakistan".

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