Allina Health Colorectal Cancer Program Consensus Guidelines

These guidelines apply to clinical interventions that have well-documented outcomes, but whose outcomes are not clearly desirable to all patients

Approved By: Allina Health Colorectal Program Committee
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USE OF IMAGING IN COLON CANCER

INTRODUCTION:

As part of initial staging for any colon cancer patient, a CT Chest/abdomen/pelvis (CT CAP) is recommended preoperatively. This is to ensure both resectability of disease and ruling out potential distant disease that may alter surgical decision making. After curative resection of colon cancer there has been shown to be a benefit to surveillance screening via annual CT CAP for up to 5 years in high risk stages in patients whose performance status and medical comorbidities would allow intervention in early intervention for metastatic disease.

RECOMMENDATIONS:

Diagnosis:
1. CT CAP at all stages
2. PET/CT scan is only recommended if abnormality on CT needs further clarifying or if solitary metastasis that can be amenable to resection and positive PET findings elsewhere would alter therapy.
3. MRI Abdomen : if question of resectable liver lesion and required for such evaluation and or unable to tolerate IV contrast with CT

Surveillance:
1. Stage 1: no surveillance imaging recommended.
2. T3N0,T4N0 and node positive: annual CT CAP for up to5 years.
3. PET/CT only if abnormality on CT that needs further clarifying, or a rising CEA with negative CT CAP

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SCOPE:

Sites, Facilities, Business Units	Departments, Divisions, Operational Areas	People applicable to (MD, NP, Administration, Contractors etc.)
Allina – all facilities	Medical Oncology	MD
Allina – all facilities	Surgeons	MD
Allina - all facilities	Pathology	MD
Allina - all facilities	Radiation Oncology	MD
Allina – all facilities	Radiologist	MD
Allina – all facilities	Gastroenterology	MD

OVERVIEW AND SUPPORTING EVIDENCE:

While the role of PET/CT has evolved over the years, it has been found that with the excellent sensitivity of CT scans there is no additional benefit of PET/CT in surveillance, based mainly on the lack of IV contrast use and image interval with CT scans, thus making PET/CT an inadequate anatomical visualization tool by itself. Additionally PET/CT scans will not visualize sub centimeter lesions any better than a full dose CT scan will.

Therefore with PET/CT as an inadequate surveillance tool, it is recommended to perform a CT CAP at diagnosis for patients of any stage colon cancer and annually in follow-up after curative resection of high risk Stage 2 and all Stage 3 patients. Trials have shown the benefit of high intensity screening in this higher risk for recurrence population to provide a survival benefit by finding solitary recurrences amenable to resection.

REFERENCES:

NCCN colorectal cancer guidelines

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Desch CE, Benson AB, and Sommerfield MD, et al. Colorectal Cancer Surveillance: 2005 update of an American Society of Clinical Oncology practice guideline. J Clin Oncol 2005; 23:8512-8519

Renehan AG, Egger M, Saunder MD, O'Dwyer ST. Impact on Survival of Intensive follow up after curative resection for colorectal cancer: Systematic review and meta-analysis of randomized trials. BMJ 2002; 324:813

Allina Colon Imaging Measures

1. At Diagnosis %
    a. CT CAP prior to surgery
    b. Completed CAP in one setting
2. Number of PET/CT in Stage 1-3 for initial imaging
3. Number of CT scan in Stage 1 colon cancer for routine follow up
4. Number of PET/CT in Stage 1-3 for routine follow up.