



CLINICAL APPROACH TO RECTAL CANCER

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Introduction

The optimal approach to treating rectal adenocarcinoma depends on a number of factors, of which the location in the rectum and the local disease extent are most important.

- limited invasive cancer in a polyp: polypectomy alone
- locally extensive, fixed, bulky tumors/extensive nodal disease/extramural venous invasion: total neoadjuvant approach

DIAGNOSIS

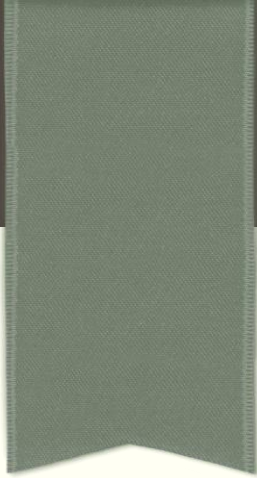
- Colonoscopy after presenting with lower gastrointestinal tract bleeding
- Finding a lesion during a routine screening colonoscopy or incidentally on an imaging study
- If a mass is noted during colonoscopy, a biopsy should be performed.

The pretreatment staging evaluation

- Assess the presence of distant metastatic disease and to determine the tumor location in the rectum and its local extent.
- Select the surgical approach and to identify those patients who are candidates for initial therapy prior to surgery.
- Digital clinical examination, magnetic resonance imaging or transrectal ultrasound.

TNM staging

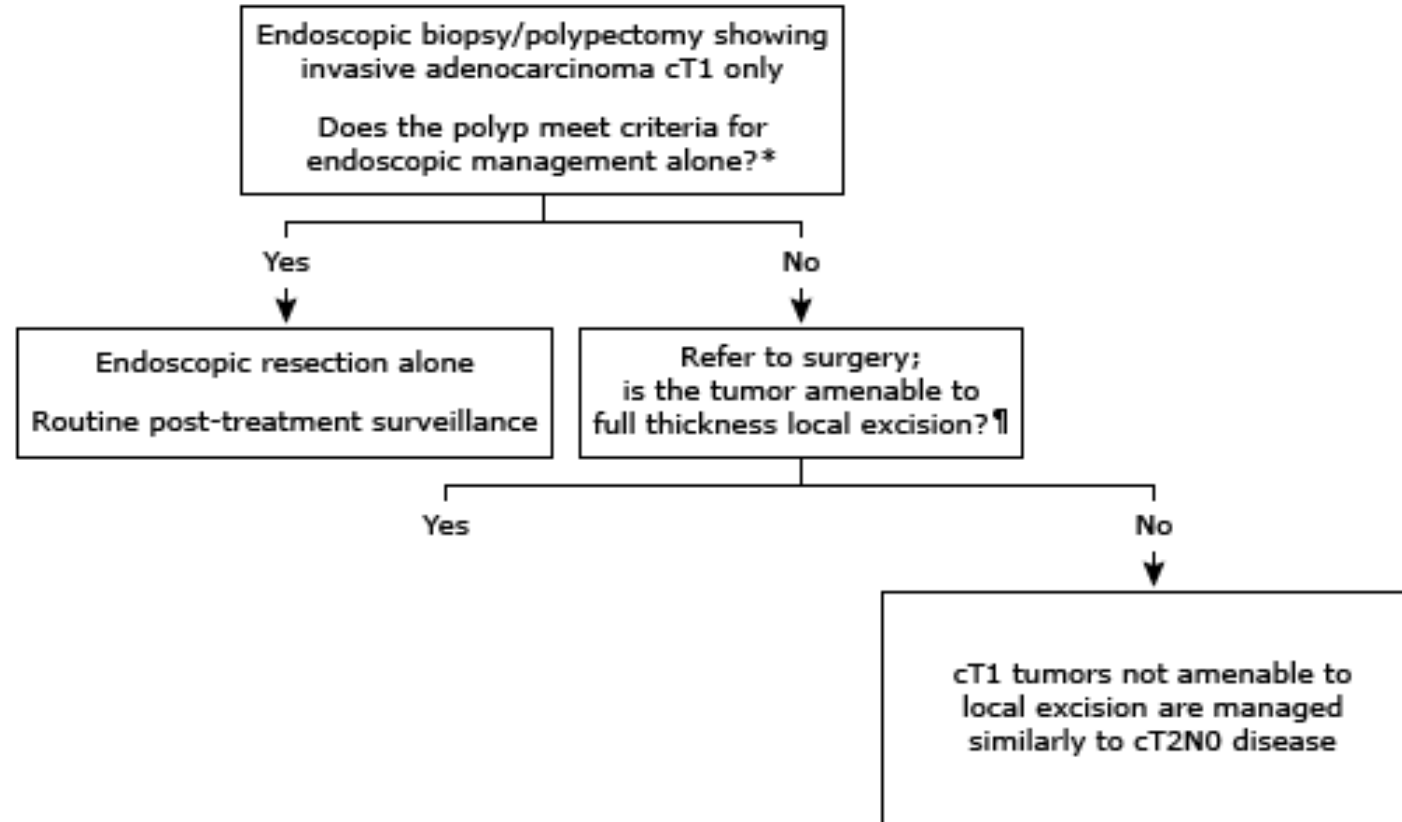
- Rectal cancers are staged using the tumor, node, metastasis (TNM) staging system.
- cTNM is the clinical classification
- pTNM is the pathologic classification



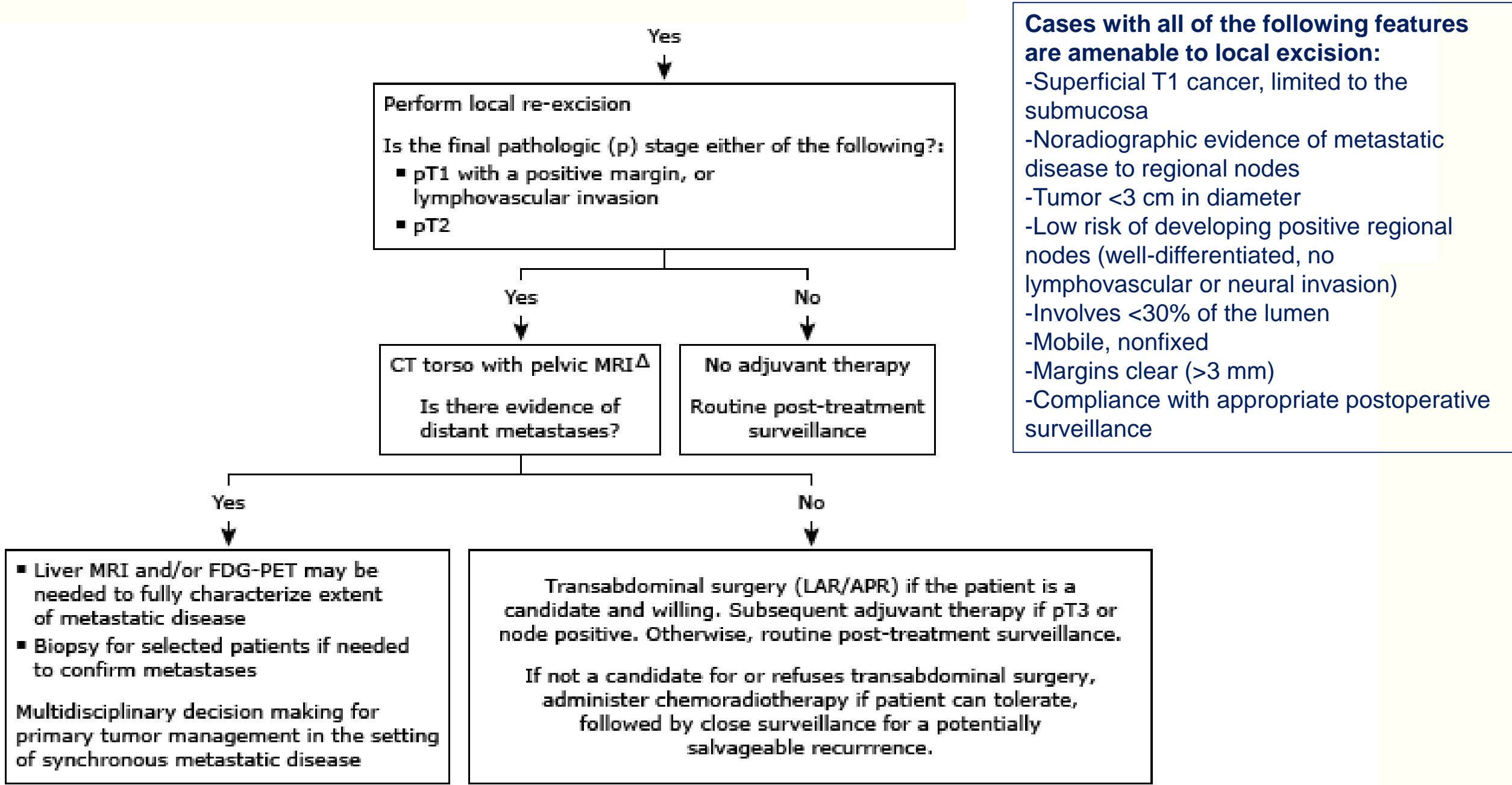
TREATMENT ALGORITHMS

Treatment for newly diagnosed cT1 rectal cancer

T1 tumors invade through the muscularis mucosa but not into the muscularis propria



*endoscopic excision alone is not appropriate for malignant polyps with any of the following: piecemeal resection, poorly differentiated histology, lymphovascular or perineural invasion, tumor budding (foci of isolated cancer cells or a cluster of five or fewer cancer cells at the invasive margin of the polyp), cancer at resection margin submucosal invasion depth ≥ 1 mm



- Cases with all of the following features are amenable to local excision:**
- Superficial T1 cancer, limited to the submucosa
 - Noradiographic evidence of metastatic disease to regional nodes
 - Tumor <3 cm in diameter
 - Low risk of developing positive regional nodes (well-differentiated, no lymphovascular or neural invasion)
 - Involves <30% of the lumen
 - Mobile, nonfixed
 - Margins clear (>3 mm)
 - Compliance with appropriate postoperative surveillance

Δ if pelvic MRI has been done, we perform abdominal and chest CT. if pelvic MRI has not been done, we perform abdominopelvic and chest CT.

Management of newly diagnosed cT2N0 rectal adenocarcinoma or cT1 disease not amenable to local excision

T2 tumors invade the muscularis propria but not into the pericolorectal tissues.

Endoscopic biopsy/polypectomy showing invasive adenocarcinoma cT2, or cT1 and not amenable to endoscopic excision or local excision*

Clinical staging:

- Pelvic MRI (preferred) and/or EUS for all patients
- CT for all except cT1N0 with favorable histologic features †

Refer for multidisciplinary evaluation (surgery, radiation oncology, medical oncology)

Suspicion for metastatic disease?

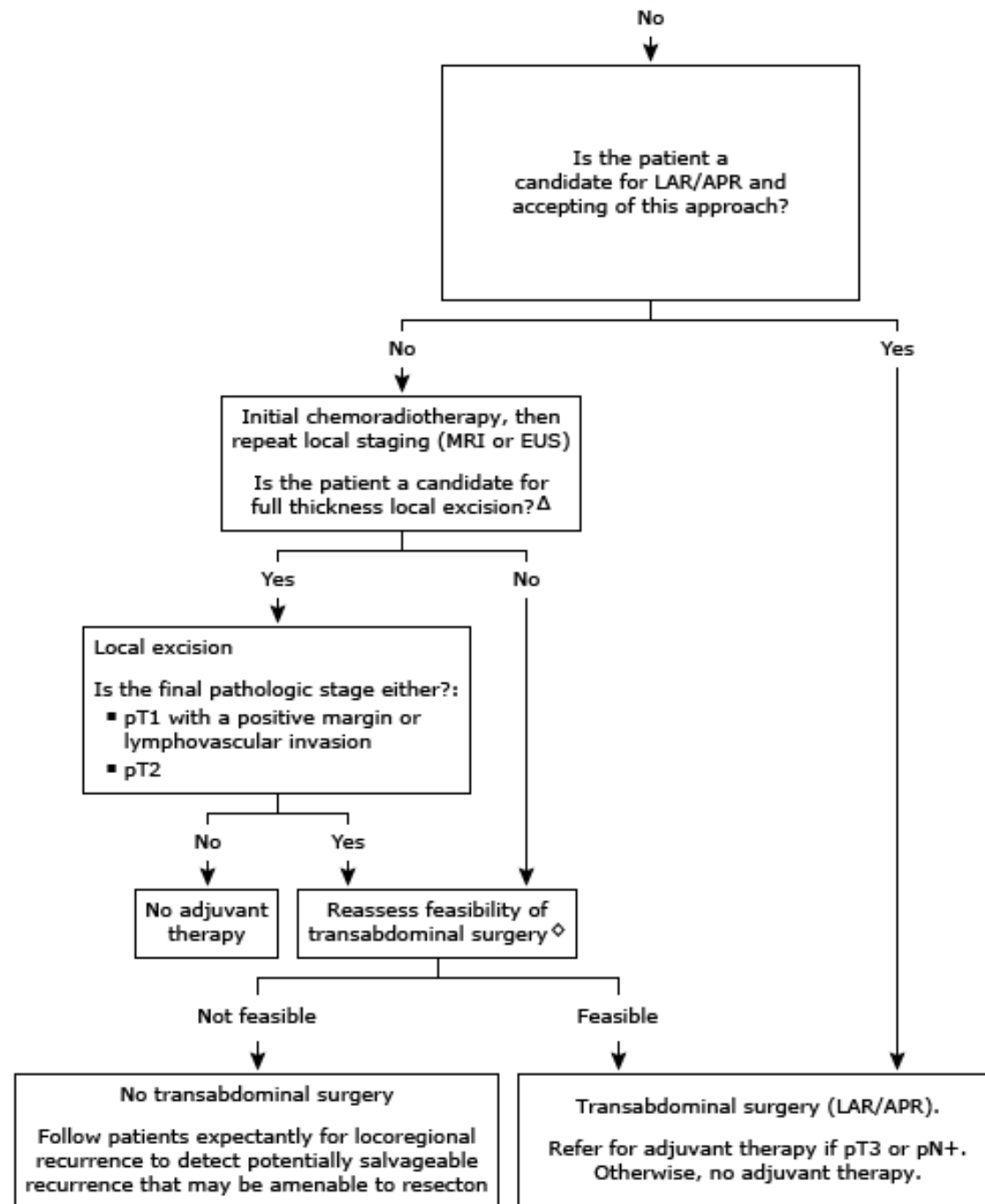
Yes

No



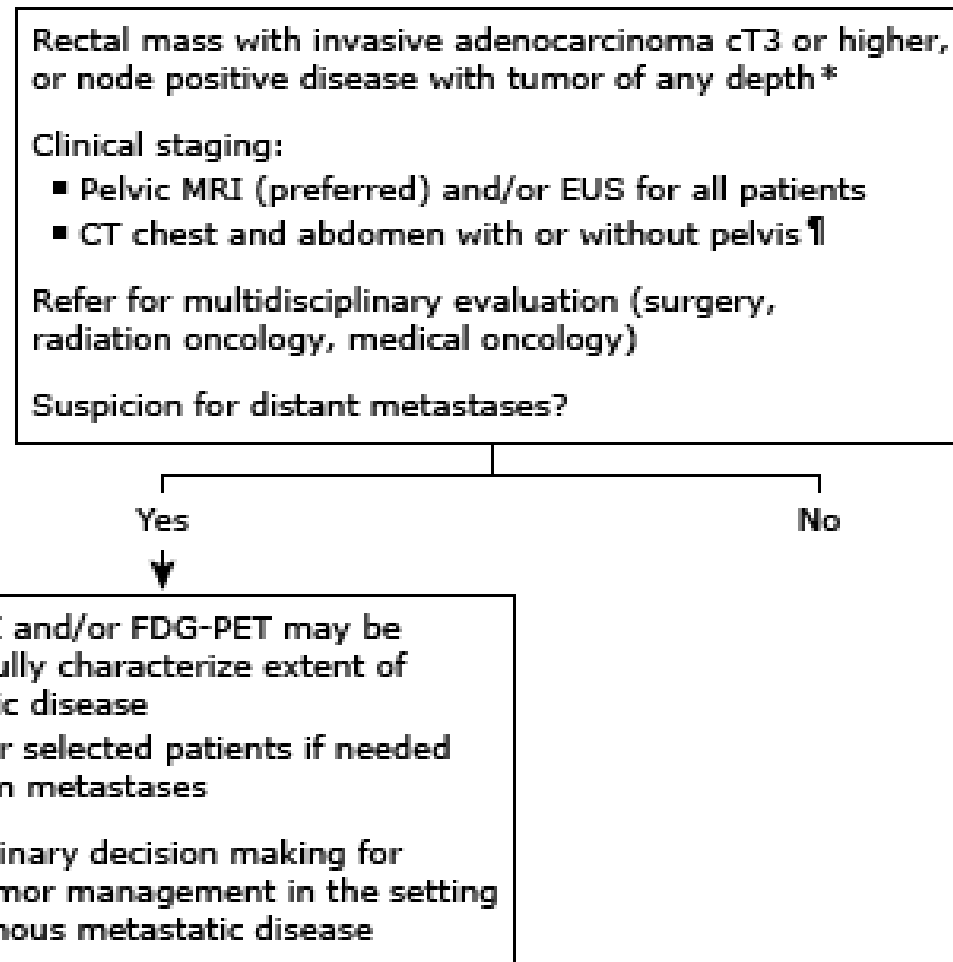
- Liver MRI and/or FDG-PET may be needed to fully characterize extent of metastatic disease
- Biopsy may be needed in selected patients to confirm metastases

Multidisciplinary decision making for primary tumor management in the setting of synchronous metastatic disease

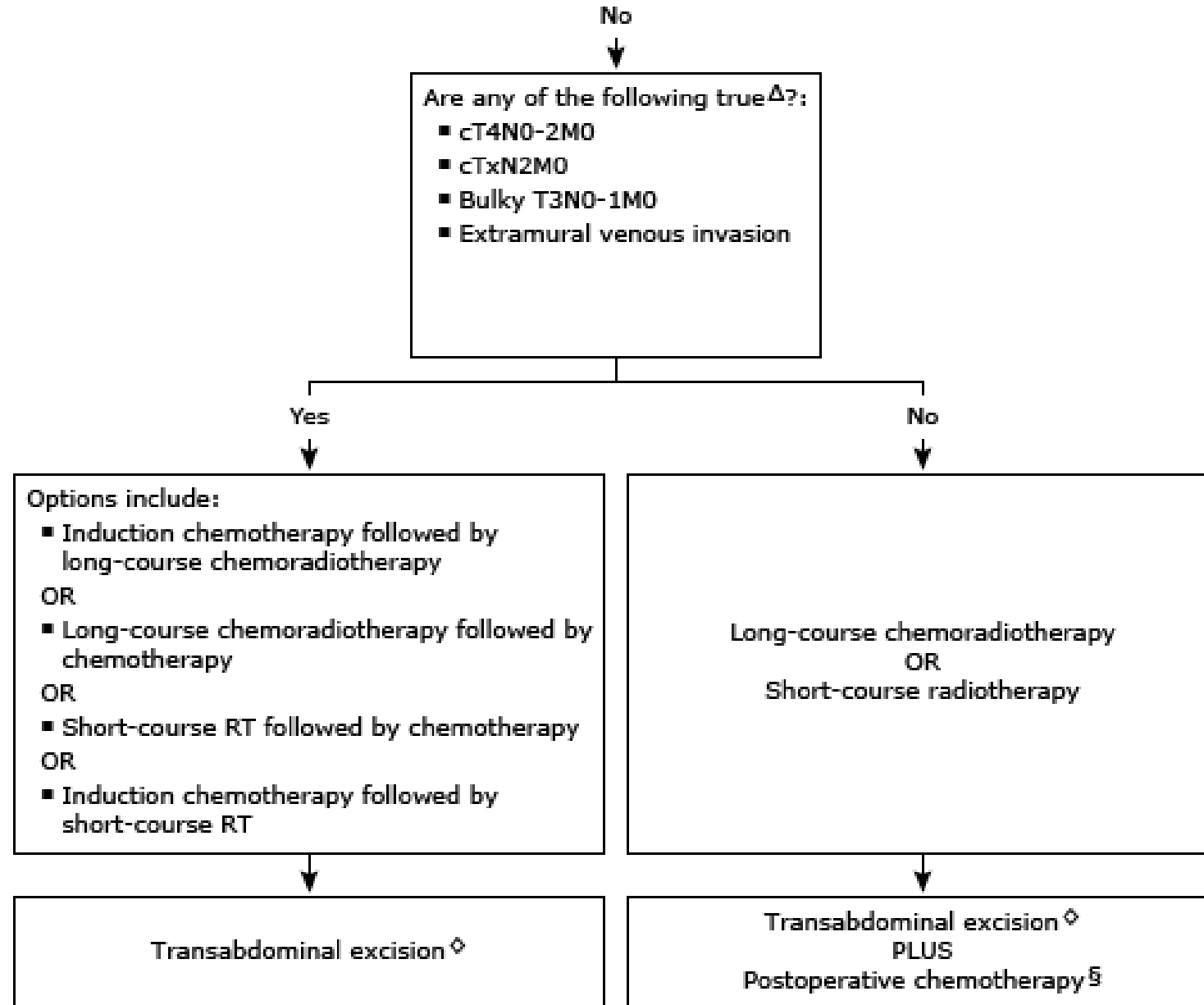


Management of newly diagnosed locally advanced (cT3-4 or node positive) rectal adenocarcinoma

cT3 invades through the muscularis propria into pericorectal tissues.



For patients presenting with locally advanced rectal adenocarcinomas, preoperative radiotherapy is preferred over initial surgery.



Case

- 62 y/o male
- Lower GIB for 2 years
- Weight loss + /perianal pain +
- P/E: painful rectal mass out of anal verge
- Colonoscopy 1400: mass lesion at the rectum just after anal verge
- Pathology 1400: adenocarcinoma
- Management: staging → thoracic CT scan with IV contrast, abdominopelvic CT scan with IV and oral contrast, abdominopelvic MRI with and w/o contrast