**Review Article** 

# Outline of Japanese Guidelines for Colorectal Endoscopic Submucosal Dissection and Endoscopic Mucosal Resection with a Short Reference to the Western Recommendations

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#### Abstract

The Japan Gastroenterological Endoscopy Society published the latest English versions of the guidelines for endoscopic submucosal dissection and endoscopic mucosal resection for colorectal neoplastic lesions and colorectal cold polypectomy in 2020 and 2022, respectively. In this article, I present a comprehensive overview of these guidelines, including a comparison with the Western recommendations.

### **Keywords**

colorectal neoplasm, endoscopic submucosal dissection, endoscopic mucosal resection, cold polypectomy, guideline

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### Introduction

Colorectal cancer (CRC) is the second leading cause of death from cancer not only in Japan but also worldwide[1]. The Japanese Society for Cancer of the Colon and Rectum (JSCCR) has been publishing guidelines for the treatment of CRC, with the latest English version published in 2019[2]. Their guidelines encompass many clinical questions (CQs) and statements for all kinds of treatments for CRC, including surgical operation, endoscopic resection, chemotherapy, radiation therapy, and palliative care.

In the meantime, endoscopic detection and resection of early-stage CRCs or their precursor lesions have been developed, especially in Japan. They are now considered to be vital for suppressing the death toll. In these circumstances, the Japan Gastroenterological Endoscopy Society (JGES) put forward the first guidelines for endoscopic submucosal dissection (ESD) and endoscopic mucosal resection (EMR) for colorectal neoplastic lesions in the Japanese language in 2014 and in English in 2015[3]. They were revised, and their Japanese and English versions were published in 2019

and 2020, respectively[4]. Now that cold polypectomy is widely accepted as a resection method for small colorectal lesions, guidelines for this procedure were reported as a supplement to the abovementioned JGES guidelines in the Japanese language in 2021, followed by the English version in 2022[5]. In this article, I present a comprehensive overview of the Japanese guidelines for colorectal ESD, EMR, and cold polypectomy based on the abovementioned guidelines with a short reference to the Western recommendations.

# **Terminology and Definition**

Laterally spreading tumor (LST) is classified into the granular type (LST-G) and nongranular type (LST-NG); LST-G is further divided into the homogeneous type (LST-G (Homo)) and mixed nodular type (LST-G (Mix)), and LST-NG is subclassified into the flat-elevated type LST-NG (F) and pseudo-depressed type (LST-NG (PD))[6].

American societies divide colorectal neoplasms into lowand high-grade dysplasia and carcinoma and limit the use of the term "colorectal carcinoma" or "malignant polyps" only

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Received: August 13, 2023, Accepted: November 7, 2023 Copyright © 2024 The Japan Society of Coloproctology to invasive neoplasms[7]. However, in the Japanese guidelines that adopt the TNM Classification, they are classified into low- and high-grade adenomas and intramucosal and invasive carcinomas[6].

Here, intramucosal carcinoma or "Tis" includes intraepithelial carcinoma (true meaning of carcinoma *in situ*) and lesions where neoplastic colonocytes invade through the epithelial basement membrane into the lamina propria of the mucosa but without extension through the muscularis mucosae into the submucosa.

Concerning the depth of submucosally invasive carcinoma (T1), classifications of "sm1, 2, and 3" were proposed by Kudo et al.[8] and other groups[9,10] and have been used for a long time both in and outside Japan. The weakest point of these classifications is that they divided the submucosal layer into three (sm1, 2, and 3), which is according to the proportion of invasion compared with the full thickness of the submucosal layer. They are easy to apply to surgically resected specimens, but not in endoscopically resected ones as the latter do not contain the full thickness of the submucosa. Nowadays, therefore, Japanese societies recommend describing the actual measurement value of the submucosal invasion depth[11]. T1a refers to carcinoma with an invasion depth of <1000 µm and T1b refers to an invasion depth of ≥1000 µm.

The following is the summary of the classification of early CRC by depth:

Tis: Tumor is confined to the mucosa (M) and does not invade the submucosa (SM)

T1: Tumor is confined to the SM and does not invade the muscularis propria (MP)

T1a: Tumor is confined to the SM, and invasion is within  $1000\ \mu m$ 

T1b: Tumor is confined to the SM, and invasion is 1000  $\mu$ m or more, but it does not extend to the MP

In the Japanese guidelines, the letter "c" is put before the T classification when the cancer depth is diagnosed clinically (endoscopically), and the letter "p" when diagnosed pathologically, such as cT1b and pT1a.

The terms for endoscopic resection methods are also defined in the guidelines. In EMR, the lesion is elevated by a local injection of a liquid (e.g., physiological saline) into the SM, and the lesion is electrocauterized. "Underwater EMR"[12] is a technique to snare the lesion underwater without any liquid injection into the SM layer; therefore, it has not been categorized as EMR in these guidelines[4].

# **CQs** and statements

#### 1. Indication for endoscopic treatment: noncarcinoma

Resection is recommended for adenomas  $\geq$  6- mm in size. In addition, resection is recommended for superficial

depressed-type lesions (type 0-IIc) even when the lesion is  $\leq 5$ - mm in size.

Typical hyperplastic polyps  $\leq 5$ - mm in size that are present in the distal colon may be left untreated.

(strength of recommendation: 1, level of evidence: C)[4]

Guidelines outside of Japan recommend resection of all detected adenomatous polyps. For example, the European Society of Gastrointestinal Endoscopy (ESGE) recommends that "all polyps be resected except for diminutive (≤ 5- mm) rectal and rectosigmoid polyps that are predicted with high confidence to be hyperplastic"[13].

Despite an extensive search of available literature, we could find no clear evidence regarding the rate of development into carcinoma and the prognosis of diminutive lesions ≤ 5- mm in size in cases where such lesions are left untreated. Certain studies have reported that colorectal adenomas ≤ 5- mm in size that had been followed for several years showed null or minimal changes[14-16]. A previous study reported that there was no significant difference in the 5-year cumulative incidence of advanced colorectal neoplasia (ACN) between patients with untreated diminutive adenomas and those with no adenomas and that no ACN developed from unresected adenomas[17]. Therefore, prompt treatment may not be required for protruded- and superficial elevated-type adenomas ≤ 5- mm in size.

*CQ:* What are the indications for cold polypectomy? Statement:

The indications should be limited to lesions smaller than 10 mm that are preoperatively diagnosed as adenoma and which can be resected completely en bloc.

(strength of recommendation: 1, level of evidence: B)[5]

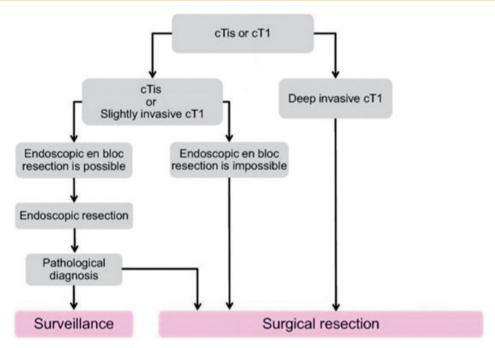
Because cold snare polypectomy (CSP) has a lower rate of *en-bloc* resection and a higher risk of positive tumor margins for polyps  $\geq 10$ - mm in size compared with those measuring <10- mm, CSP cannot be recommended for polyps  $\geq$  10- mm in size. The incomplete resection rate for polyps measuring 6-9- mm was significantly higher with CSP than with EMR. Therefore, the indication for CSP should be limited to adenomas, and EMR should be selected for lesions suspected to be intramucosal or slightly invasive cancer and slightly depressed lesions, for which complete *en-bloc* resection is desirable.

The use of image-enhanced endoscopy with magnification is recommended for a highly accurate preoperative diagnosis of colorecta lesions before cold polypectomy.

ESGE recommends CSP as the preferred technique for the removal of diminutive polyps (≤5 mm) and suggests CSP for sessile polyps 6-9 mm in size[13].

# 2. Indication for endoscopic treatment: carcinoma

Among early colorectal carcinomas (Tis/T1), lesions with limited possibility of lymph node metastasis that seem resectable en bloc on the basis of size and location are rec-



**Figure 1.** Treatment strategies for cTis and cT1 colorectal cancer [2] (quoted from reference 2. The copyright holder permitted using this figure.).

ommended for endoscopic treatment because such cases are expected to be curable.

Obvious clinical T1b carcinomas are recommended to be treated surgically.

(strength of recommendation: 1, level of evidence: C)[4]

According to JSCCR, the general principles underlying the indications for endoscopic resection should be that there is little possibility of lymph node metastasis, and that the size and location of the tumor make *en-bloc* resection possible. It also describes that the indication criteria for endoscopic resection include intramucosal carcinoma or carcinoma with slight submucosal invasion (regardless of size) and any macroscopic type will do[2].

Deeply invasive submucosal cancer (T1b) is diagnosed based on endoscopic findings which include firmness, rough surface, ulcer formation, subepithelial lesion-like appearance, fold convergence, and wall deformity and rigidity, with white light view as well as image-enhanced endoscopy (dye or non-dye), magnification endoscopy, and endoscopic ultrasound.

Although it has been stated that surgical treatment of obvious clinical T1b carcinomas is recommended, endoscopic diagnosis may not be perfect. Endoscopic resection can be intended both for diagnosis (total excisional biopsy) and treatment. As often the case in the real world, endoscopic treatment is performed even when the lesion is predicted to be T1b, followed by the pathological assessment of the curability and the necessity for additional intestinal resection with lymphadenectomy (Figure 1).

Although a majority of such lesions are T1 carcinomas, a

lesion showing a positive non-lifting sign can potentially be a mucosal tumor (adenoma or mucosal carcinoma).

Therefore, if a lesion is endoscopically judged as a mucosal tumor, ESD/EMR is appropriate.

(strength of recommendation: 2, level of evidence: B)[4]

Colorectal tumors occasionally show a positive non-lifting sign as a result of peristaltic motion or fibrosis caused by biopsy, although such lesions are usually of the mucosal type. Therefore, preoperative endoscopic diagnosis should be carefully made with observation using magnification endoscopy before endoscopic treatment for a neoplastic lesion.

En bloc resection is desirable as an endoscopic treatment for early colorectal carcinomas

(strength of recommendation: 1, level of evidence: B)[4]

Piecemeal EMR is permissible for certain adenomas and "carcinoma in adenoma" lesions when appropriately conducted. If submucosally invasive carcinoma is cut into pieces, pathological diagnosis for the invasion depth and lymphovascular invasion would be difficult, and necessary additional treatment might not be given. Finally, the possibility of residual or local recurrence would be higher. Thus, when performing piecemeal EMR, observation using magnification endoscopy should be cautiously conducted before treatment, and the carcinomatous area should never be cut into pieces.

The largest size for a tumor to be easily resected *en-bloc* by polypectomy or snare EMR is 2 cm[2]. Colorectal ESD is an endoscopic resection technique that enables the *en-bloc* resection of a tumor, regardless of size[2].

CQ: Is endoscopic submucosal dissection (ESD) recom-

**Table 1.** Indications for Endoscopic Submucosal Dissection of Colorectal Tumor (Quoted and Modified from Reference 4. The Copyright Holder Permitted Using This Table.).

Lesions for which endoscopic en-bloc resection is required

- 1) Lesions for which en-bloc resection with snare EMR is difficult to apply
  - LST-NG, particularly LST-NG (PD)
  - · Lesions showing Type VI pit pattern
  - · Carcinoma with shallow T1 (SM) invasion: T1a
  - Large depressed-type (type 0-IIc) tumors
  - · Large protruded-type lesions suspected to be carcinoma†
- 2) Mucosal tumors with submucosal fibrosis‡
- 3) Sporadic tumors associated with chronic inflammation such as ulcerative colitis
- 4) Local residual or recurrent early carcinomas after endoscopic resection

†Including LST-G, nodular mixed type: LST-G (Mix)

‡As a result of a previous biopsy or prolapse caused by peristalsis of the intestine

mended for lesions with a maximum diameter of 2 cm or more?

#### Statement:

Endoscopic resection for lesions with a maximum diameter of 2 cm or more includes EMR, piecemeal EMR, and ESD.

An accurate preoperative endoscopic diagnosis is essential in endoscopic resection. Selection of EMR, piecemeal EMR, or ESD is determined after taking the operator's skill into consideration.

As a general rule, en bloc resection is recommended for suspected cancer lesions. If en bloc EMR is judged to be difficult, we recommend ESD (en bloc resection) by a skillful endoscopist.

# (strength of recommendation: 1, level of evidence: B)[2]

In determining the indication for endoscopic treatment and the treatment method, information on the size, predicted depth of invasion, and morphology of the tumor is essential. *En bloc* resection is desirable for the accurate diagnosis of the status of carcinoma invasion in the resection margin and the deepest area.

LST-NG (PD) is associated with multifocal invasion, the foci of which are often difficult to predict. In addition, LST-NG (PD) is frequently associated with fibrosis. Therefore, in several cases, EMR is not suitable for LST-NG (PD). Considering the high possibility of deep submucosal invasion in LST-NG (PD), whether the lesion is indicated for surgical operation or endoscopic treatment should be cautiously considered. To determine the indication for ESD or EMR for LST, overall judgment based on the subclassification of LST and the pit pattern diagnosis using magnifying observation is useful.

For large lesions with a size greater than half of the circumference of the colorectal lumen, piecemeal EMR should be avoided, and ESD should be conducted. However, ESD should be implemented after sufficient consideration of the

level of skill of the endoscopist performing the procedure. Only when ESD is not possible, surgery is considered an alternative treatment.

Japanese health insurance is implemented for the treatment of early colon cancer (including cTis) with a maximum diameter of 2- cm or more. In the case of early colon cancer accompanying fibrosis, the insurance is applied even when the diameter is less than 2- cm. Details of lesions indicated for the ESD technique are presented in Table 1.

ESGE recommends polypectomy and/or EMR (*en bloc* or piecemeal) as the treatment of choice for most superficial colorectal lesions (strong recommendation, high-quality evidence) and suggests that ESD should be considered for *en bloc* resection of colorectal (but particularly rectal) lesions with a suspicion of limited submucosal invasion (demarcated depressed area with irregular surface pattern or a large protruding or bulky component, particularly if the lesions are larger than 20 mm), or for lesions that otherwise cannot be completely removed by snare-based techniques (weak recommendation, moderate-quality evidence)[18].

American experts describe that the indications for ESD are relatively few, even for experienced centers, because most colorectal neoplasms are benign and can be resected using piecemeal EMR with minimal risk of recurrence[19,20]. According to them, large-sized (>20- mm in diameter) lesions that are indicated for endoscopic rather than surgical resection, and in which *en bloc* resection using inject-and-cut EMR is difficult, ESD may be considered, and these include lesions suspected to have submucosal invasion (i.e., large depressed lesion or LST-NG (PD)), mucosal lesions with fibrosis, local residual early carcinoma after endoscopic resection, and nonpolypoid colorectal dysplasia in patients with inflammatory bowel disease.

# 3. Preoperative diagnosis

Distinction between adenoma and adenocarcinoma with

high accuracy can be achieved with use of image-enhanced endoscopy and magnifying observation.

(strength of recommendation: 2, level of evidence: A)[4]

Biopsy should not be done in principle for qualitative diagnosis.

(strength of recommendation: 2, level of evidence: C)[4]

The reasons why biopsy cannot be recommended are as follows:

\*You have to wait for the pathological result; thus, you cannot remove the lesion on site.

\*A small biopsy specimen may not represent the whole lesion and may lead to a wrong diagnosis.

\*Distinction between high-grade dysplasia and invasive cancer, and prediction of cancer depth is difficult in biopsy specimens.

\*Taking a biopsy specimen may cause submucosal fibrosis and may interfere with the endoscopic resection that follows, especially in the case of nonpolypoid lesions.

Therefore, a diagnosis based on image enhancement/magnifying endoscopic observation as an optical biopsy (histological diagnosis by endoscopic imaging without forceps biopsy) is more effective.

For early colorectal carcinoma, it is necessary to estimate the degree of SM invasion before carrying out endoscopic treatment

(strength of recommendation: 1, level of evidence: A)[4]

Carcinomatous and adenomatous parts of the lesion must be correctly assessed and distinguished. Consequently, therapeutic strategies such as the application of ESD or EMR, the selection of piecemeal EMR, and the planning of cut lines in piecemeal EMR should be determined.

Risks of vascular invasion and lymph node metastasis differ according to the submucosal invasion depth of a carcinoma. Therefore, the degree of submucosal invasion must be estimated before conducting endoscopic treatment. Furthermore, to conduct an accurate pathological evaluation of endoscopically resected specimens, pathologists must not overlook the invasive site(s).

# 4. Complications during the procedures

The following CQs and statements are described in the guideline[5].

CQ: Do adverse events occur less frequently in cold polypectomy than in endoscopic resection with electrocautery?

Statement:

It is likely that postprocedural bleeding occurs less frequently and perforation is encountered negligibly in cold polypectomy compared with endoscopic resection with electrocautery.

(strength of recommendation: none, level of evidence: C)[5]

CQ: Is the risk for postprocedural bleeding in patients on antithrombotic therapy lower with cold polypectomy than with endoscopic resection with electrocautery?

Statement:

It is likely that the risk for postprocedural bleeding in patients on antithrombotic therapy is lower with cold polypectomy than with endoscopic resection with electrocautery.

(strength of recommendation: none, level of evidence: C)[5]

The effect of the application of prophylactic clips on delayed bleeding has been discussed frequently. A study reported that prophylactic clip application was effective for lesions > 20- mm in size[21]. A recent US multicenter randomized trial, however, found that prophylactic placement of hemoclips after removal of large colon polyps does not influence the rate of important postendoscopic resection bleeding[22]. The effectiveness of prophylactic clip application for high-risk lesions must be further evaluated through high-quality prospective studies. A previous study reported that delayed bleeding rate after polypectomy was significantly higher in the patient group taking anticoagulant drugs than in the patient group not taking them[23].

When perforation occurs during the procedure, clipping should be carried out as far as possible, regardless of the location.

(strength of recommendation: 1, level of evidence: C)[4]

In cases of a rectal lesion below the peritoneal reflection, perforation into the abdominal cavity does not occur because of anatomical features; however, perforation into the retroperitoneum occurs and, consequently, mediastinal emphysema or subcutaneous emphysema may occur.

American experts recommend the following[19]:

\*A detailed inspection of the postresection mucosal defect to identify features for immediate or delayed perforation risk, and perform endoscopic clip closure, accordingly. (strong recommendation; moderate-quality evidence)

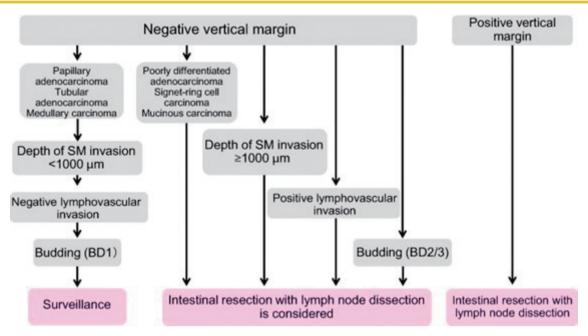
\*Prophylactic closure of resection defects that are ≥ 20mm in size in the right colon, when closure is feasible. (conditional recommendation; moderate-quality evidence)

During perioperative care after endoscopic treatment, attention should be paid to delayed perforation and delayed bleeding, and patients should be hospitalized if necessary.

(strength of recommendation: 2, level of evidence: C)[4]

In the Japanese situation, EMR for lesions < 2- cm in size can be conducted for outpatients, while EMR and ESD for lesions ≥ 2- cm in size should be done after the patient is hospitalized. In contrast, EMR and ESD are frequently done as a day-surgery in many Western countries because the hospitalization cost is high, and the fee is not covered by insurance.

# 5. Curability assessment of endoscopic resection and following additional treatment



**Figure 2.** Treatment strategies for pT1 colorectal cancer after endoscopic resection [2] (quoted from reference 2. The copyright holder permitted using this figure.).

CQ: Is the accuracy of a histopathological diagnosis equivalent for the resected specimens retrieved with cold snare polypectomy and for those with endoscopic resection with electrocautery?

#### Statement:

It is likely that the pathological characterization is equivalent or superior, but the evaluation of the lateral/vertical margins is inferior in the specimens after cold snare polypectomy compared with those after endoscopic resection with electrocautery.

(strength of recommendation: none, level of evidence: C)[5]

CQ: Is the rate of residual/local recurrence after cold polypectomy higher than that after endoscopic resection with electrocautery?

#### Statement 1:

The rate of residual/local recurrence after CSP is almost the same as that after HSP.

(strength of recommendation: none, level of evidence: C)[5]

# Statement 2:

The rate of residual/local recurrence after CSP may be higher than that after EMR, but this is not clear at present.

(strength of recommendation: none, level of evidence: D)[5]

No reports on local recurrence after EMR for small lesions were found. Nevertheless, the rate of local recurrence for small lesions is presumably higher in CSP than in EMR, in which local recurrence is rarely observed.

Concerning T1carcinoma, the following statements are

#### published (Figure 2):

Additional surgical operation should be carried out for deep tumor margin-positive lesions as a result of incomplete endoscopic resection (highly recommended).

In the case of complete endoscopic resection, pT1 (SM) carcinomas can be judged to have been radically cured when all of the following conditions are satisfied on histological analysis:

- (i) vertical tumor margin-negative (histological complete resection)
  - (ii) papillary adenocarcinoma or tubular adenocarcinoma
  - (iii) SM invasion depth <1000 μm
  - (iv) no vascular invasion
  - (v) tumor budding grade 1 (low grade)

In these cases, careful observation is advised because the incidence of recurrence is extremely rare.

(strength of recommendation: 2, level of evidence: B)[4]

- CQ: What are the indication criteria for additional treatment after endoscopic resection of pT1 colorectal cancer?
- 1. Surgical resection is recommended when the vertical margin is positive

(strength of recommendation: 1, level of evidence: C)[4]

2. If any of the following findings is observed during histological examination of the resected specimen, intestinal resection with lymph node dissection is recommended as an additional treatment

(strength of recommendation: 2, level of evidence: B)[4]

- (1) T1b (depth of SM invasion  $\geq$  1000  $\mu$ m)
- (2) Lymphovascular invasion: positive
- (3) Poorly differentiated adenocarcinoma, signet-ring cell

carcinoma, or mucinous carcinoma

(4) Budding grade of BD2/3 at the site of deepest invasion

If any of these five conditions is encountered, the estimated rate of lymph node metastasis of the lesion and the background of the patient (i.e., age, coexisting disease, physical activity, intention, and quality of life after surgery that includes factors such as construction of an artificial anus) are comprehensively evaluated, and the indication for additional surgical resection is considered.

According to the results of the project study by the JSCCR, the lymph node metastasis rate of colorectal carcinoma with an SM invasion depth of 1000- µm or more was 12.5%. However, not all cases with a submucosal invasion of ≥1000- µm necessarily require additional surgery. Approximately, 90% of patients with an invasion depth of > 1000- µm or more did not have lymph node metastasis, and it is important to determine whether additional treatment is indicated after sufficiently considering other factors in addition to the depth of submucosal invasion, such as whether other risk factors for lymph node metastasis are present, the physical and social background of the patient, and the patient's wishes.

ESGE recommends that an en-bloc R0 resection of a colorectal lesion with histology no more advanced than that of an intramucosal adenocarcinoma, well- to- moderately differentiated, and with no lymphovascular invasion, should be considered a very low-risk (curative) resection, and no further staging procedure or treatment is generally recom-(Strong recommendation, high-quality dence)[18]. ESGE recommends that an en-bloc R0 resection of a colorectal lesion with a superficial submucosal invasion (sm1), well- to- moderately differentiated, with no lymphovascular invasion, and no grade 2 or 3 budding, should be considered a low-risk (curative) resection, and no further treatment is generally recommended (strong recommendation, high-quality evidence)[18]. ESGE suggests that after an en-bloc R0 resection of a rectal lesion meeting the single high-risk criterion of submucosal invasion deeper than sm1 (well- to- moderately differentiated with no lymphovascular invasion and no grade 2 or 3 budding), CRT and/or surveillance might be preferred over surgery on an individual basis in a multidisciplinary approach (weak recommendation, very low-quality evidence)[18].

Cold polypectomy may often result in a positive or indefinite margin of the resected specimen.

CQ: Should an additional surgical resection be performed in case the lesion is concluded to be cancerous after cold polypectomy?

Statement:

In cases where histopathological risk factors, such as the vertical margin, are positive or the cancer depth is undeterminable, colonoscopy should be repeated sufficiently early.

Subsequently, additional endoscopic or surgical resection should be considered, as necessary.

(strength of recommendation: 2, level of evidence: D)[5]

# 6. Follow up after endoscopic resection

In adenoma or pTis (M) carcinomas, when piecemeal resection is used or the tumor margin after resection is unclear and curability cannot be accurately evaluated, colonoscopy should be carried out approximately 6 months after endoscopic treatment.

(strength of recommendation: 2, level of evidence: C)[4]

CQ: Is surveillance recommended after endoscopic resection of early colorectal cancer?

Statement:

1. When en bloc endoscopic resection is completed with a negative margin, then it is recommended that surveillance should be performed by endoscopic examination for approximately 1 year for the purpose of searching for any metachronous colon tumors

(strength of recommendation: 2, level of evidence: B)[2]

2. When piecemeal endoscopic resection is conducted with a positive horizontal margin, then it is recommended that surveillance should be performed by endoscopic examination for approximately 6 months, as the risks for local recurrence are increased

(strength of recommendation: 1, level of evidence: C)[2]

3. When an additional intestinal resection is not carried out for pT1 cancer, it is recommended that surveillance should be performed via endoscopic examination along with image diagnoses such as CT and tumor markers for the purpose of searching for lymph node metastasis and distant metastasis

(strength of recommendation: 1, level of evidence: B)[2]

ESGE recommends that after piecemeal resection or in the presence of positive lateral margins when criteria for additional treatment are not met, a high-definition chromoendoscopy (virtual and/or dye-based) with biopsies is recommended at 3-6 months after the initial treatment (weak recommendation. low-quality evidence)[18].

Conflicts of Interest

There are no conflicts of interest.

Disclaimer

Hiroshi Kashida is one of the Associate Editors of Journal of the Anus, Rectum and Colon and on the journal's Editorial Board. He was not involved in the editorial evaluation or decision to accept this article for publication at all.

The editors of the original version and the Journal of the Anus, Rectum, and Colon have permitted the secondary publication of this paper.

This article is based on a study reported in the Japanese Society for Cancer of the Colon and Rectum 2019 guidelines for the treatment of colorectal cancer [2] and the Japan Gastroenterological Endoscopy Society guidelines for colorectal endoscopic submucosal dissection/endoscopic mucosal resection [4].

The original version is available at https://onlinelibrary.wiley.com/doi/10.1111/den.13545.

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