



MASSACHUSETTS

Blue Cross Blue Shield of Massachusetts is an independent licensee of the Blue Cross and Blue Shield Association

Medical Policy Transanal Endoscopic Microsurgery

Table of Contents

- [Policy: Commercial](#)
- [Authorization Information](#)
- [Coding Information](#)
- [Description](#)
- [Policy History](#)
- [References](#)
- [Information Pertaining to All Policies](#)

Policy Number: 200

BCBSA Reference Number: 7.01.112 (For Plan internal use only)

Related Policies

None

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Transanal endoscopic microsurgery for treatment of rectal adenomas, including recurrent adenomas that cannot be removed using other means of local excision may be considered **MEDICALLY NECESSARY**.

Transanal endoscopic microsurgery for treatment of clinical stage T1 rectal adenocarcinomas that cannot be removed using other means of local excision and that meet all of the following criteria may be considered **MEDICALLY NECESSARY**:

- Located in the middle or upper part of the rectum, AND
- Well or moderately differentiated (G1 or G2) by biopsy, AND
- Without lymphadenopathy, AND
- Less than 1/3 the circumference of the rectum.

Transanal endoscopic microsurgery for treatment of rectal tumors that do not meet the above criteria is **INVESTIGATIONAL**.

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is not required .
Commercial PPO and Indemnity	Prior authorization is not required .

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above **medical necessity criteria MUST** be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
0184T	Excision of rectal tumor, transanal endoscopic microsurgical approach (i.e., TEMS)

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT code above if **medical necessity criteria** are met:

ICD-10 Diagnosis Codes

ICD-10-CM Diagnosis codes:	Code Description
C20	Malignant neoplasm of rectum
D01.2	Carcinoma in situ of rectum
D12.8	Benign neoplasm of rectum

Description

Transanal Endoscopic Microsurgery

Transanal endoscopic microsurgery (TEM) is a minimally invasive approach to local excision of rectal lesions. It has been used in benign conditions such as large rectal polyps (that cannot be removed through a colonoscope), retrorectal masses, rectal strictures, rectal fistulae, pelvic abscesses, and in malignant conditions (eg, malignant polyps). Use of TEM for resection of rectal cancers is more controversial. TEM can avoid the morbidity and mortality associated with major rectal surgery, including the fecal incontinence related to stretching of the anal sphincter, and can be performed under general or regional anesthesia.

The TEM system has a specialized magnifying rectoscope with ports for insufflation, instrumentation, and irrigation. This procedure has been available in Europe but has not been widely used in the U.S. Two reasons for this slow adoption are the steep learning curve for the procedure and the limited indications. For example, most rectal polyps can be removed endoscopically, and many rectal cancers need a wide excision and are thus not amenable to local resection.

Other Treatment Options

The most common treatment for rectal cancer is surgery; the technique chosen will depend on several factors. The size and location of the tumor, evidence of local or distal spread, and patient characteristics and goals are all attributes that will affect the treatment approach. Open, wide resections have the highest cure rate but may also have significant adverse events. Most patients find the potential adverse events of lifelong colostomy and/or bowel, bladder, or sexual dysfunction acceptable in the face of a terminal illness. Laparoscopic-assisted surgery, with lymph node dissection as indicated, is technically difficult in the pelvic region but is being investigated as a less invasive alternative to open resection.

Local excision alone does not offer the opportunity for lymph node biopsy and therefore has been reserved for patients in whom the likelihood of cancerous extension is small; local excision can occur under direct visualization in rectal tumors within 10 cm of the anal verge. TEM extends local excision ability to the proximal rectosigmoid junction. Adenomas, small carcinoid tumors, and nonmalignant conditions (eg, strictures, abscesses) are amenable to local excision by either method.

The use of local excision in rectal adenocarcinoma is an area of much interest and may be most appropriate in small tumors (<4 cm) confined to the submucosa (T1, as defined by the tumor, node, and metastasis staging system). Presurgical clinical staging, however, may miss up to 15% of regional lymph node spread. During local excision, the excised specimen should be examined by a pathologist; if adverse features such as high-grade pathology or unclear margins are observed, the procedure can be converted to a wider resection. Despite this increased risk of local recurrence, local excision may be an informed alternative for patients. TEM permits local excision beyond the reach of direct visualization equipment.

Summary

Transanal endoscopic microsurgery (TEM) is a minimally invasive approach for local excision of rectal lesions that cannot be directly visualized. It is an alternative to open or laparoscopic excision and has been studied in the treatment of both benign and malignant conditions of the rectum.

For individuals who have rectal adenoma(s) who receive TEM, the evidence includes a few nonrandomized comparative studies and numerous single-arm case series. Relevant outcomes are overall survival, functional outcomes, health status measures, quality of life, and treatment-related morbidity. The evidence supports conclusions that the removal of polyps by TEM is associated with low postoperative complication rates and low-risk of recurrence. However, due to the low quality of the evidence base, no conclusions can be made on the comparative efficacy of TEM and standard procedures. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have early rectal adenocarcinoma who receive TEM, the evidence includes 2 small randomized controlled trials, a few nonrandomized comparative studies, and numerous single-arm case series. Relevant outcomes are overall survival, functional outcomes, health status measures, quality of life, and treatment-related morbidity. The evidence supports conclusions that TEM is associated with fewer postoperative complications but higher local recurrence rates and possibly higher rates of metastatic disease. There is no demonstrated difference in long-term overall survival with TEM in available studies. However, due to the low quality of the evidence base, these conclusions lack certainty. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Policy History

Date	Action
1/2022	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
1/2021	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
1/2021	Medicare information removed. See MP #132 Medicare Advantage Management for local coverage determination and national coverage determination reference.
12/2019	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
1/2019	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
2/2018	Clarified coding information.
12/2016	Annual policy review. New references added.
11/2015	Annual policy review. New references added. Clarified coding information.

6/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
12/2013	Annual policy review. New references added.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
10/2011	Reviewed - Medical Policy Group - GI, Nutrition and Organ Transplantation. No changes to policy statements.
11/2010	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements.
7/1/2010	Medical Policy #200 created.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

References

1. Barendse RM, van den Broek FJ, Dekker E, et al. Systematic review of endoscopic mucosal resection versus transanal endoscopic microsurgery for large rectal adenomas. *Endoscopy*. Nov 2011; 43(11): 941-9. PMID 21971923
2. Middleton PF, Sutherland LM, Maddern GJ. Transanal endoscopic microsurgery: a systematic review. *Dis Colon Rectum*. Feb 2005; 48(2): 270-84. PMID 15711865
3. Restivo A, Zorcolo L, D'Alia G, et al. Risk of complications and long-term functional alterations after local excision of rectal tumors with transanal endoscopic microsurgery (TEM). *Int J Colorectal Dis*. Feb 2016; 31(2): 257-66. PMID 26298182
4. Issa N, Murninkas A, Schmilovitz-Weiss H, et al. Transanal Endoscopic Microsurgery After Neoadjuvant Chemoradiotherapy for Rectal Cancer. *J Laparoendosc Adv Surg Tech A*. Aug 2015; 25(8): 617-24. PMID 26258267
5. Verseveld M, Barendse RM, Gosselink MP, et al. Transanal minimally invasive surgery: impact on quality of life and functional outcome. *Surg Endosc*. Mar 2016; 30(3): 1184-7. PMID 26139488
6. D'Ambrosio G, Paganini AM, Balla A, et al. Quality of life in non-early rectal cancer treated by neoadjuvant radio-chemotherapy and endoluminal loco-regional resection (ELRR) by transanal endoscopic microsurgery (TEM) versus laparoscopic total mesorectal excision. *Surg Endosc*. Feb 2016; 30(2): 504-511. PMID 26045097
7. Verseveld M, de Graaf EJ, Verhoef C, et al. Chemoradiation therapy for rectal cancer in the distal rectum followed by organ-sparing transanal endoscopic microsurgery (CARTS study). *Br J Surg*. Jun 2015; 102(7): 853-60. PMID 25847025
8. Laliberte AS, Lebrun A, Drolet S, et al. Transanal endoscopic microsurgery as an outpatient procedure is feasible and safe. *Surg Endosc*. Dec 2015; 29(12): 3454-9. PMID 25801107
9. Samalavicius N, Ambrasevicius M, Kilius A, et al. Transanal endoscopic microsurgery for early rectal cancer: single center experience. *Wideochir Inne Tech Maloinwazyjne*. Dec 2014; 9(4): 603-7. PMID 25561999
10. Mora Lopez L, Serra Aracil X, Hermoso Bosch J, et al. Study of anorectal function after transanal endoscopic surgery. *Int J Surg*. Jan 2015; 13: 142-147. PMID 25486265
11. Hompes R, Ashraf SQ, Gosselink MP, et al. Evaluation of quality of life and function at 1 year after transanal endoscopic microsurgery. *Colorectal Dis*. Feb 2015; 17(2): O54-61. PMID 25476189
12. Stipa F, Picchio M, Burza A, et al. Long-term outcome of local excision after preoperative chemoradiation for ypT0 rectal cancer. *Dis Colon Rectum*. Nov 2014; 57(11): 1245-52. PMID 25285690

13. Verseveld M, Barendse RM, Dawson I, et al. Intramucosal carcinoma of the rectum can be safely treated with transanal endoscopic microsurgery; clinical support of the revised Vienna classification. *Surg Endosc.* Nov 2014; 28(11): 3210-5. PMID 24939156
14. Zacharakis E, Freilich S, Rekhraj S, et al. Transanal endoscopic microsurgery for rectal tumors: the St. Mary's experience. *Am J Surg.* Nov 2007; 194(5): 694-8. PMID 17936438
15. Cataldo PA. Transanal endoscopic microsurgery. *Surg Clin North Am.* Aug 2006; 86(4): 915-25. PMID 16905416
16. Al-Najami I, Rancinger CP, Larsen MK, et al. Transanal endoscopic microsurgery for advanced polyps and early cancers in the rectum-Long-term outcome: A STROBE compliant observational study. *Medicine (Baltimore).* Sep 2016; 95(36): e4732. PMID 27603369
17. Chan T, Karimuddin AA, Raval MJ, et al. Predictors of rectal adenoma recurrence following transanal endoscopic surgery: a retrospective cohort study. *Surg Endosc.* Aug 2020; 34(8): 3398-3407. PMID 31512037
18. Xiong X, Wang C, Wang B, et al. Can transanal endoscopic microsurgery effectively treat T1 or T2 rectal cancer? A systematic review and meta-analysis. *Surg Oncol.* Jun 2021; 37: 101561. PMID 33848762
19. Lu JY, Lin GL, Qiu HZ, et al. Comparison of Transanal Endoscopic Microsurgery and Total Mesorectal Excision in the Treatment of T1 Rectal Cancer: A Meta-Analysis. *PLoS One.* 2015; 10(10): e0141427. PMID 26505895
20. Clancy C, Burke JP, Albert MR, et al. Transanal endoscopic microsurgery versus standard transanal excision for the removal of rectal neoplasms: a systematic review and meta-analysis. *Dis Colon Rectum.* Feb 2015; 58(2): 254-61. PMID 25585086
21. Sajid MS, Farag S, Leung P, et al. Systematic review and meta-analysis of published trials comparing the effectiveness of transanal endoscopic microsurgery and radical resection in the management of early rectal cancer. *Colorectal Dis.* Jan 2014; 16(1): 2-14. PMID 24330432
22. Wu Y, Wu YY, Li S, et al. TEM and conventional rectal surgery for T1 rectal cancer: a meta-analysis. *Hepatogastroenterology.* Mar-Apr 2011; 58(106): 364-8. PMID 21661397
23. Sgourakis G, Lanitis S, Gockel I, et al. Transanal endoscopic microsurgery for T1 and T2 rectal cancers: a meta-analysis and meta-regression analysis of outcomes. *Am Surg.* Jun 2011; 77(6): 761-72. PMID 21679648
24. Doornebosch PG, Tollenaar RA, De Graaf EJ. Is the increasing role of Transanal Endoscopic Microsurgery in curation for T1 rectal cancer justified? A systematic review. *Acta Oncol.* 2009; 48(3): 343-53. PMID 18855161
25. Lezoche E, Baldarelli M, Lezoche G, et al. Randomized clinical trial of endoluminal locoregional resection versus laparoscopic total mesorectal excision for T2 rectal cancer after neoadjuvant therapy. *Br J Surg.* Sep 2012; 99(9): 1211-8. PMID 22864880
26. Lezoche G, Baldarelli M, Guerrieri M, et al. A prospective randomized study with a 5-year minimum follow-up evaluation of transanal endoscopic microsurgery versus laparoscopic total mesorectal excision after neoadjuvant therapy. *Surg Endosc.* Feb 2008; 22(2): 352-8. PMID 17943364
27. Walega P, Kenig J, Richter P, et al. Functional and clinical results of transanal endoscopic microsurgery combined with endoscopic posterior mesorectum resection for the treatment of patients with t1 rectal cancer. *World J Surg.* Jul 2010; 34(7): 1604-8. PMID 20174804
28. Moore JS, Cataldo PA, Osler T, et al. Transanal endoscopic microsurgery is more effective than traditional transanal excision for resection of rectal masses. *Dis Colon Rectum.* Jul 2008; 51(7): 1026-30; discussion 1030-1. PMID 18481147
29. Doornebosch PG, Ferenschild FT, de Wilt JH, et al. Treatment of recurrence after transanal endoscopic microsurgery (TEM) for T1 rectal cancer. *Dis Colon Rectum.* Sep 2010; 53(9): 1234-9. PMID 20706065
30. Tsai BM, Finne CO, Nordenstam JF, et al. Transanal endoscopic microsurgery resection of rectal tumors: outcomes and recommendations. *Dis Colon Rectum.* Jan 2010; 53(1): 16-23. PMID 20010345
31. Allaix ME, Arezzo A, Caldart M, et al. Transanal endoscopic microsurgery for rectal neoplasms: experience of 300 consecutive cases. *Dis Colon Rectum.* Nov 2009; 52(11): 1831-6. PMID 19966628
32. Friel CM. Local excision of T1 rectal cancer: where are we now?. *Dis Colon Rectum.* Sep 2010; 53(9): 1231-3. PMID 20706064

33. van Heinsbergen M, Leijtens JW, Slooter GD, et al. Quality of Life and Bowel Dysfunction after Transanal Endoscopic Microsurgery for Rectal Cancer: One Third of Patients Experience Major Low Anterior Resection Syndrome. *Dig Surg.* 2020; 37(1): 39-46. PMID 31185474
34. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Rectal Cancer. Version 2.2021. https://www.nccn.org/professionals/physician_gls/pdf/rectal.pdf. Accessed October 5, 2021.
35. National Cancer Institute (NCI). Rectal Cancer Treatment (PDQ). Healthcare Provider Version. https://www.cancer.gov/types/colorectal/hp/rectal-treatment-pdq#_43. Updated August 16, 2021. Accessed October 5, 2021.
36. You YN, Hardiman KM, Bafford A, et al. The American Society of Colon and Rectal Surgeons Clinical Practice Guidelines for the Management of Rectal Cancer. *Dis Colon Rectum.* Sep 2020; 63(9): 1191-1222. PMID 33216491
37. Blackstock W, Russo SM, Suh WW, et al. ACR Appropriateness Criteria: local excision in early-stage rectal cancer. *Curr Probl Cancer.* May-Jun 2010; 34(3): 193-200. PMID 20541057
38. Russo S, Blackstock AW, Herman JM, et al. ACR Appropriateness Criteria(R) Local Excision in Early Stage Rectal Cancer. *Am J Clin Oncol.* Oct 2015; 38(5): 520-5. PMID 26371522