NICE National Institute for Health and Care Excellence

NICE guideline

Barrett's oesophagus and stage 1 oesophageal adenocarcinoma: monitoring and management

NICE guideline
Published: 8 February 2023
www.nice.org.uk/guidance/ng231

Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

All problems (adverse events) related to a medicine or medical device used for treatment or in a procedure should be reported to the Medicines and Healthcare products Regulatory Agency using the Yellow Card Scheme.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Contents

This guideline replaces CG106.

This guideline should be read in conjunction with NG83.

Overview

This guideline covers monitoring, treatment and follow-up for people aged 18 and over with Barrett's oesophagus and stage 1 oesophageal adenocarcinoma. It includes advice on endoscopic and non-endoscopic techniques. It aims to improve outcomes by ensuring the most effective investigations and treatments are used.

Who is it for?

- Healthcare professionals
- Adults with Barrett's oesophagus, their families and carers

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in NICE's information on making decisions about your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

The stages of cancer/oesophageal adenocarcinoma referred to in this guideline are based on the 8th edition of the Union for International Cancer Control (UICC) tumour node metastasis (TNM) classification of malignant tumours.

1.1 Information and support

1.1.1 Offer a clinical consultation to people with newly diagnosed Barrett's oesophagus to discuss risk of cancer, endoscopic surveillance plans and symptom control.

1.1.2 Give the person verbal and written information about their diagnosis, available treatments and patient support groups. Give them time to consider this information when making decisions about their care.

1.1.3 After each surveillance procedure, provide the person with an endoscopy report that includes a lay summary of the findings and a reference to ongoing symptom control.

1.1.4 Follow the recommendations on communication and information in the NICE guidelines on patient experience in adult NHS services and shared decision making.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on information and support.

Full details of the evidence and the committee's discussion are in evidence review A: patient information and support.

1.2 Pharmacological interventions

Symptom control

1.2.1 Follow the recommendations on interventions for gastro-oesophageal reflux disease (GORD) in the NICE guideline on gastro-oesophageal reflux disease and dyspepsia in adults.

Preventing disease progression

1.2.2 Do not offer aspirin to people with Barrett's oesophagus to prevent progression to oesophageal dysplasia and cancer.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on pharmacological interventions.

Full details of the evidence and the committee's discussion are in evidence review B: pharmacological interventions to reduce progression to dysplasia or cancer.

1.3 Endoscopic surveillance

1.3.1 Discuss the benefits and risks of endoscopic surveillance with the person diagnosed with Barrett's oesophagus.

1.3.2 Offer high resolution white light endoscopy with Seattle biopsy protocol for surveillance of Barrett's oesophagus. Take into account the health of

the person and ensure the benefits of surveillance outweigh the risks.

Frequency of endoscopic surveillance

1.3.3 Offer high resolution white light endoscopic surveillance with Seattle protocol biopsies:

- every 2 to 3 years to people with long-segment (3 cm or longer) Barrett's oesophagus
- every 3 to 5 years to people with short-segment (less than 3 cm) Barrett's oesophagus with intestinal metaplasia.

1.3.4 Assess a person's risk of cancer based on their age, sex, family history of oesophageal cancer and smoking history and tailor the frequency of endoscopic surveillance accordingly, within the intervals given in recommendation 1.3.3.

1.3.5 Do not offer endoscopic surveillance to people with short-segment (less than 3 cm) Barrett's oesophagus without intestinal metaplasia provided the diagnosis has been confirmed at 2 endoscopies.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on endoscopic surveillance.

Full details of the evidence and the committee's discussion are in:

evidence reviews C: endoscopic surveillance using white light endoscopy, D: diagnostic accuracy of endoscopic surveillance techniques, E: non-endoscopic surveillance techniques and F: frequency and duration of endoscopic surveillance.

1.4 Staging for suspected stage 1 oesophageal adenocarcinoma

1.4.1 Offer endoscopic resection for staging, to people with suspected stage 1

oesophageal adenocarcinoma.

1.4.2 Do not use CT before endoscopic resection for staging suspected T1 oesophageal adenocarcinoma.

1.4.3 Do not use endoscopic ultrasonography (EUS) before endoscopic resection for staging suspected T1a oesophageal adenocarcinoma.

1.4.4 Consider EUS for nodal staging, for people with suspected T1b oesophageal adenocarcinoma based on endoscopic appearances or diagnosed with T1b oesophageal adenocarcinoma based on histological examination of endoscopic resection specimens.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on staging for suspected stage 1 oesophageal adenocarcinoma.

Full details of the evidence and the committee's discussion are in evidence review G: endoscopic and radiological staging techniques.

1.5 Managing Barrett's oesophagus with dysplasia

1.5.1 Offer endoscopic resection of visible oesophageal lesions as first-line treatment to people with high-grade dysplasia.

1.5.2 Offer endoscopic ablation of any residual Barrett's oesophagus to people with high-grade dysplasia after treatment with endoscopic resection.

1.5.3 Offer radiofrequency ablation to people with low-grade oesophageal dysplasia diagnosed from biopsies taken at 2 separate endoscopies. Two gastrointestinal pathologists should confirm the histological diagnosis.

1.5.4 Consider endoscopic surveillance at 6 monthly intervals with dose optimisation of acid-suppressant medication for people diagnosed with indefinite dysplasia of the oesophagus.

1.5.5 Offer endoscopic follow-up to people who have received endoscopic treatment for Barrett's oesophagus with dysplasia.

1.5.6 Follow the NICE interventional procedures guidance on endoscopic radiofrequency ablation for Barrett's oesophagus with low-grade dysplasia or no dysplasia and epithelial radiofrequency ablation for Barrett's oesophagus.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on managing Barrett's oesophagus with dysplasia.

Full details of the evidence and the committee's discussion are in evidence reviews H: endoscopic treatment (high-grade dysplasia and stage 1 adenocarcinoma), I: endoscopic treatment (low-grade dysplasia and indefinite dysplasia) and J: endoscopic and radiological follow-up after treatment.

1.6 Managing stage 1 oesophageal adenocarcinoma

1.6.1 Offer a clinical consultation to people with stage 1 oesophageal adenocarcinoma to discuss and evaluate the suitability of treatment options, including endoscopic resection or oesophagectomy.

1.6.2 Offer endoscopic resection as first-line treatment to people with T1a oesophageal adenocarcinoma.

1.6.3 Offer endoscopic ablation of any residual Barrett's oesophagus to people with T1a oesophageal adenocarcinoma after treatment with endoscopic resection.

1.6.4 Offer endoscopic follow-up to people who have received endoscopic treatment for stage 1 oesophageal adenocarcinoma.

1.6.5 Offer oesophagectomy to people with T1b oesophageal adenocarcinoma who are fit for surgery and at high risk of cancer progression. For example, where there is:

- incomplete endoscopic resection
- evidence of lymphovascular invasion or deep submucosal invasion (more than 500 micron) on histological examination of endoscopic resection specimens.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on managing stage 1 oesophageal adenocarcinoma.

Full details of the evidence and the committee's discussion are in evidence reviews J: endoscopic and radiological follow-up after treatment and K: oesophagectomy versus endoscopic treatment.

1.7 Non-surgical treatment for T1b oesophageal adenocarcinoma

1.7.1 Consider radiotherapy (alone or in combination with chemotherapy) for people with T1b oesophageal adenocarcinoma at high risk of cancer progression (for example, incomplete endoscopic resection, or evidence of lymphovascular invasion or deep submucosal invasion (more than 500 micron) on histological examination of endoscopic resection specimens) and who are unfit for oesophagectomy.

1.7.2 Offer endoscopic follow-up to people who have received radiotherapy for T1b oesophageal adenocarcinoma.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on non-surgical treatment for T1b oesophageal adenocarcinoma.

Full details of the evidence and the committee's discussion are in evidence reviews L: non-surgical treatment for T1b oesophageal adenocarcinoma and J: endoscopic and radiological follow-up after treatment.

1.8 Anti-reflux surgery

1.8.1 Do not offer anti-reflux surgery to people with Barrett's oesophagus to prevent progression to dysplasia or cancer.

1.8.2 Follow the recommendations on laparoscopic fundoplication for gastro-oesophageal reflux disease in the NICE guideline on gastro-oesophageal reflux disease and dyspepsia in adults.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on anti-reflux surgery.

Full details of the evidence and the committee's discussion are in evidence reviews M: anti-reflux surgery to induce remission of disease or prevent recurrence and N: anti-reflux surgery to reduce progression to dysplasia or cancer.

Terms used in this guideline

This section defines terms that have been used in this guideline.

Barrett's oesophagus

An oesophagus in which any portion of the normal distal squamous epithelial lining has been replaced by metaplastic columnar epithelium, which is clearly visible endoscopically (≥1 cm) above the gastro-oesophageal junction and confirmed histopathologically from oesophageal biopsies.

Seattle biopsy protocol

Entails four-quadrant random biopsies for every 2 cm of Barrett's oesophagus in addition to targeted biopsies on macroscopically visible lesions.

Stage 1 adenocarcinoma

Any oesophageal adenocarcinoma with T1 stage and no lymph node (N0) or distant metastasis (M0).

Recommendations for research

The guideline committee has made the following recommendations for research.

1 Diagnostic accuracy of endoscopic surveillance

What is the diagnostic accuracy of different endoscopic surveillance techniques including high resolution endoscopy and chromoendoscopy for use in adults?

For a short explanation of why the committee made this recommendation for research, see the rationale section on endoscopic surveillance.

Full details of the evidence and the committee's discussion are in evidence review F: frequency and duration of endoscopic surveillance techniques.

2 Frequency and duration of endoscopic surveillance

What is the usefulness of clinical and molecular biomarkers to inform the optimal frequency and duration of endoscopic surveillance for adults with Barrett's oesophagus?

For a short explanation of why the committee made this recommendation for research, see the rationale section on endoscopic surveillance.

Full details of the evidence and the committee's discussion are in evidence review F: frequency and duration of endoscopic surveillance techniques.

3 Oesophagectomy

What is the effectiveness of endoscopic resection with or without adjuvant chemoradiotherapy and oesophagectomy for adults with T1b oesophageal adenocarcinoma?

For a short explanation of why the committee made this recommendation for research, see the rationale section on managing stage 1 oesophageal adenocarcinoma.

Full details of the evidence and the committee's discussion are in evidence review K: oesophagectomy versus endoscopy treatment.

4 Endoscopic treatments

For adults with Barrett's oesophagus with dysplasia, what is the effectiveness of different endoscopic ablation techniques alone or in combination with endoscopic resection?

For a short explanation of why the committee made this recommendation for research, see the rationale section on managing Barrett's oesophagus with dysplasia.

Full details of the evidence and the committee's discussion are in evidence review H: endoscopic treatment (high-grade dysplasia and stage 1 adenocarcinoma).

For adults with stage 1 oesophageal adenocarcinoma, what is the effectiveness of different endoscopic ablation techniques alone or in combination with endoscopic resection?

For a short explanation of why the committee made this recommendation for research, see the rationale section on managing stage 1 oesophageal adenocarcinoma.

Full details of the evidence and the committee's discussion are in evidence review H: endoscopic treatment (high-grade dysplasia and stage 1 adenocarcinoma).

5 Frequency and duration of endoscopic follow-up

What is the optimal frequency and duration of endoscopic follow-up for patients who have received endoscopic treatment for Barrett's oesophagus with dysplasia?

For a short explanation of why the committee made this recommendation for research, see the rationale section on managing Barrett's oesophagus with dysplasia.

Full details of the evidence and the committee's discussion are in evidence review J: endoscopic and radiological follow-up after treatment.

What is the optimal frequency and duration of endoscopic follow-up for patients who have received endoscopic treatment for stage 1 oesophageal adenocarcinoma?

For a short explanation of why the committee made this recommendation for research, see the rationale section on managing stage 1 oesophageal adenocarcinoma.

Full details of the evidence and the committee's discussion are in evidence review J: endoscopic and radiological follow-up after treatment.

Rationale and impact

These sections briefly explain why the committee made the recommendations and how they might affect practice.

Information and support

Recommendations 1.1.1 to 1.1.4

Why the committee made the recommendations

Qualitative evidence highlighted knowledge gaps and uncertainties at the time of diagnosis of Barrett's oesophagus. The committee emphasised this reflected their experience with people they see in clinical practice. They agreed a clinical consultation should be offered following diagnosis to provide information and support on the risk of progression to cancer and symptom control, and general information about endoscopic surveillance.

Providing information both verbally and in written form is helpful as information can be difficult to grasp at a single consultation and written information will enable people to revisit the information when needed. This should include general information about the diagnosis of Barrett's oesophagus, available treatments and any patient support groups.

The use of complex medical terminology limits people's ability to understand information. The committee agreed it was important that each endoscopy report includes a lay summary of the findings and that this is given to the person.

How the recommendations might affect practice

The recommendations are in line with current practice and therefore are unlikely to have a substantial resource impact.

Return to recommendations

Pharmacological interventions

Recommendations 1.2.1 and 1.2.2

Why the committee made the recommendations

Limited evidence showed that proton pump inhibitors (PPIs) had no clinically important effect on outcomes (including all-cause mortality, progression to any grade of dysplasia or cancer, and serious adverse events). The committee agreed there was insufficient evidence to recommend PPIs to prevent progression to oesophageal dysplasia and cancer and decided not to make a recommendation on this.

The committee agreed there was insufficient evidence to recommend aspirin to prevent progression to oesophageal dysplasia and cancer and decided to make a do not offer recommendation. Evidence showed that participants taking aspirin were more likely to get adverse events than those who did not, but the difference was small and not conclusive. The committee noted this was in line with their clinical experience and knowledge that bleeding is more likely to be seen in people treated with aspirin. They agreed that the inconclusive results could be attributed to a protective effect from PPIs taken by people in both the aspirin and no aspirin study groups.

Although the committee did not look for evidence on medication use for symptom control, they agreed that acid-suppressant medication such as PPIs are highly effective and widely used in current practice to control symptoms of gastro-oesophageal reflux disease in people with Barrett's oesophagus. They decided it was useful to provide a link to the relevant section of the NICE guideline on gastro-oesophageal reflux disease.

How the recommendations might affect practice

Aspirin is not currently used to prevent progression to oesophageal dysplasia and cancer. Therefore, the recommendations are not expected to result in a change in current practice or to have a resource impact.

Return to recommendations

Endoscopic surveillance

Recommendations 1.3.1 to 1.3.5

Why the committee made the recommendations

Evidence showed there was a 30% reduction in mortality for people who received endoscopic surveillance compared to those that did not. Based on this and their clinical experience, the committee agreed it should be offered to people with Barrett's oesophagus provided the person's general health is adequate, and the benefits of surveillance outweigh the risks. The committee noted this is the current standard of care for endoscopic surveillance for Barrett's oesophagus.

The committee agreed that the risk of complications of endoscopic surveillance should be considered on an individual basis because the frequency and consequences of complications will vary depending on a range of factors, including age, frailty and medical comorbidities. It was agreed that possible complications should be discussed with the person with Barrett's oesophagus.

Evidence for electronic and conventional chromoendoscopy techniques (including narrow band imaging, acetic acid, methylene blue) as well as endoscopic brushing was obtained from people with dysplasia and early-stage cancer. This means that these techniques have not been validated in an unselected population with Barrett's oesophagus undergoing standard endoscopic surveillance and therefore could not be recommended. A recommendation for research was made to assess the effectiveness of these techniques for surveillance of Barrett's oesophagus.

Frequency and duration of endoscopic surveillance

There was no evidence to support an optimal frequency for endoscopic surveillance as this will differ according to individual risk factors. However, the committee agreed to make a recommendation for frequency of surveillance based on length of segment, in line with the British Society of Gastroenterology (BSG) guidelines and current practice in the UK.

The committee agreed that the frequency of surveillance should be tailored to each person based on a clinical assessment of their risk of cancer, with length of segment, being the factor most closely linked to risk of cancer, but age, sex, family history of oesophageal cancer and smoking also being important.

In line with current practice, there was consensus that people with short-segment (less than 3 cm) Barrett's oesophagus without intestinal metaplasia (confirmed at 2 endoscopies) should not be offered endoscopic surveillance because the risk of disease progression is low in this population and there are risks associated with endoscopic surveillance.

There was no evidence on the duration of endoscopic surveillance and the committee agreed not to make a recommendation on this.

The committee emphasised that evidence of clinical and molecular biomarkers associated with a greater risk of progression to dysplasia or cancer could inform setting appropriate intervals for endoscopic surveillance and agreed to make a recommendation for research on biomarkers.

Non-endoscopic surveillance techniques (no recommendations)

There was evidence of benefit of using cytosponge to diagnose dysplasia and cancer but the quality was not sufficient to support its use at present.

Balloon brushing is an old technique that is not currently used in clinical practice. Limited evidence on cytology obtained from balloon brushing showed it could detect oesophageal dysplasia and adenocarcinoma, but the committee agreed there was insufficient evidence to recommend its use in clinical practice.

There was a lack of evidence on other non-endoscopic surveillance techniques and based on their clinical experience, the committee agreed it was not appropriate to recommend them.

How the recommendations might affect practice

Endoscopic surveillance is widely used for monitoring people with Barrett's oesophagus. Adherence to the biopsy protocols requires additional procedure time beyond that of a standard endoscopy, but many services have already increased the time allocation for Barrett's surveillance and overall resource impact is not expected to be significant.

Back to recommendations

Staging for suspected stage 1 oesophageal adenocarcinoma

Recommendations 1.4.1 to 1.4.4

Why the committee made the recommendations

In the absence of evidence on endoscopic staging techniques, the committee drew upon their clinical experience to inform decision making. They agreed that endoscopic resection should be offered to people with suspected stage 1 oesophageal adenocarcinoma as it is the most accurate staging technique and is the gold standard in current practice as recommended by the British Society of Gastroenterology (BSG) guidelines.

There are 2 techniques for resection of suspected stage 1 oesophageal adenocarcinoma: endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD). The evidence did not show superiority of 1 technique over the other so the recommendation does not specify which to use.

The committee noted, based on their clinical experience, that ESD may offer an advantage in individuals with Barrett's oesophagus-related neoplasia (lesions larger than 15 mm, poorly lifting tumours and lesions at risk for submucosal invasion) but there was no reason to select it routinely over EMR for small slightly elevated lesions because ESD is a complex procedure and is associated with more complications.

Limited evidence indicated poor diagnostic accuracy of CT as a staging technique for early stage oesophageal adenocarcinoma because the resolution of CT is inadequate in detecting very small tumours and small volume lymph node metastasis. Therefore, there was consensus that CT should not be used before endoscopic resection for staging suspected T1 oesophageal adenocarcinoma.

Limited evidence on the mini-probe endoscopic ultrasonograph (mini-probe EUS) and the conventional radial endoscopic ultrasonograph (crEUS) showed they cannot distinguish well between T1a and T1b tumours but can detect lymph node metastasis with greater accuracy. Based on the evidence and their clinical experience, the committee agreed that EUS should not be used before endoscopic resection for staging suspected T1a oesophageal adenocarcinoma, as this carries a negligible risk of lymph node metastasis.

EUS should be considered when an oesophageal lesion is suspected to be T1b cancer based on endoscopic appearances, for example sessile lesions with significant luminal component (Paris 0-Is) or depressed lesions (Paris 0-IIc). It should also be considered for people with confirmed T1b oesophageal adenocarcinoma, who have a significant risk of lymph node metastasis and may benefit from additional oncological treatment, such as radiotherapy alone or in combination with chemotherapy.

How the recommendations might affect practice

These recommendations are in line with current practice and therefore will not have a resource impact.

Back to recommendations

Managing Barrett's oesophagus with dysplasia

Recommendations 1.5.1 to 1.5.6

Why the committee made the recommendations

The evidence showed that endoscopic treatment using a combination of endoscopic resection and endoscopic ablation or endoscopic ablation alone is effective to treat people with high-grade dysplasia and prevent progression to adenocarcinoma. Based on clinical experience the committee recommended that high-grade dysplasia be endoscopically resected, when oesophageal lesions are visible at endoscopy, and the residual Barrett's oesophagus be treated with endoscopic ablation.

There are 2 techniques for resection of dysplastic lesions in Barrett's oesophagus: endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD). There is no evidence of superiority of 1 technique over the other so the recommendation does not specify which to use.

The evidence indicated that both radiofrequency ablation (RFA) and argon plasma coagulation (APC) are effective in reducing the risk of recurring oesophageal lesions in people who have received an endoscopic resection for high-grade dysplasia. However, the committee noted that for very long segment Barrett's oesophagus RFA might be more practical than APC, which has a significantly smaller ablation catheter than RFA. Given that

there is no evidence of superiority of one ablation technique over the other, the committee agreed further research was needed to determine the most effective endoscopic ablation technique to use and made a recommendation for research.

Evidence showed that RFA in people with confirmed low-grade oesophageal dysplasia protects from progression to high-grade dysplasia or cancer. The committee noted this was in line with their experience and that low-grade dysplasia is primarily managed by RFA in current practice.

Based on their clinical experience, the committee emphasised that for RFA to be offered, evidence of low-grade dysplasia from biopsies from 2 separate endoscopies and confirmation of the diagnosis by 2 gastrointestinal pathologists should be present. They noted this was in line with current practice where RFA takes place in specialist centres by endoscopists with appropriate experience and would not be considered in cases where there is evidence of low-grade oesophageal dysplasia from biopsies from only 1 endoscopy or where there is no confirmation by a second gastrointestinal pathologist.

There was no evidence to support use of other ablation techniques for treating low-grade dysplasia.

In the absence of clinical evidence on people with indefinite dysplasia of the oesophagus, the committee drew on their clinical experience to make a recommendation for this population. They emphasised that the risk of progression to high-grade oesophageal dysplasia or cancer is around 3 to 5 times higher than the risk in the non-dysplastic population and therefore endoscopic surveillance every 6 months would be appropriate. The committee also noted, based on their clinical experience, that indefinite dysplasia is often linked to excessive inflammation of the oesophagus, therefore optimisation of acid-suppressant medication is appropriate.

Follow-up after endoscopic treatment

There was no evidence comparing different strategies of endoscopic follow-up in people with Barrett's oesophagus with dysplasia and the committee drew upon their clinical experience to make a recommendation. They agreed that endoscopic follow-up is needed for people who have received endoscopic treatment for Barrett's oesophagus with dysplasia as the likelihood of recurrence is high. The committee noted this was in line with current practice.

Based on their clinical experience, the committee agreed that the frequency of follow-up should be based on the likelihood of recurrence. In the absence of evidence, the committee decided to make a recommendation for research to assess the optimal frequency and duration of endoscopic follow-up for people who have received endoscopic treatment for Barrett's oesophagus with dysplasia

How the recommendations might affect practice

These recommendations are in line with current practice and therefore will not have a resource impact.

Back to recommendations

Managing stage 1 oesophageal adenocarcinoma

Recommendations 1.6.1 to 1.6.5

Why the committee made the recommendations

The quality of the evidence was limited but reflected the committee's clinical experience that endoscopic resection and oesophagectomy are equally effective for treating stage 1 adenocarcinoma, and oesophagectomy is associated with a higher incidence of serious adverse events. There was a lack of evidence on how the 2 treatments affect quality of life so the committee drew on their own experience to consider this. As part of standard practice a clinical consultation would be offered to the person to discuss the treatment options and the advantages and disadvantages of both approaches.

Endoscopic resection is less invasive and has fewer complications than oesophagectomy. The committee agreed that even after successful endoscopic treatment there remains a risk of recurrence of Barrett's oesophagus and oesophageal neoplasia. Therefore, endoscopic treatment comes with a greater need for ongoing endoscopic surveillance, which could lead to anxiety about recurrence and possibly impacts on quality of life. This was reinforced by a patient committee member. Despite this, the committee agreed endoscopic resection is still more likely to result in better quality of life post-treatment than oesophagectomy. Therefore, it should be offered as first-line treatment to people with T1a adenocarcinoma.

There was evidence supporting the effectiveness of using endoscopic resection followed by endoscopic ablation to treat people with T1a adenocarcinoma of the oesophagus.

The evidence indicated that both radiofrequency ablation (RFA) and argon plasma coagulation (APC) are effective in reducing the risk of recurring oesophageal lesions in people who have received an endoscopic resection for T1a adenocarcinoma. However, the committee noted that for very long segment of Barrett's oesophagus RFA might be more practical than APC, which has a significantly smaller ablation catheter than RFA. Given that there is no evidence of superiority of one technique over the other, the committee agreed further research was needed to determine the most effective endoscopic ablation technique to use and made a recommendation for research.

The lack of specific evidence for people with T1b oesophageal adenocarcinoma was a concern for the committee who agreed this is where there is the most uncertainty over appropriate treatment. In the absence of evidence, the committee decided to make a recommendation to offer oesophagectomy rather than endoscopic resection for people with T1b oesophageal adenocarcinoma at high risk of cancer progression. This was based on their clinical experience that there is a greater risk of local recurrence in cases of incomplete endoscopic resection and a high risk of lymph node metastasis in cases with deep submucosal invasion (more than 500 micron) and lymphovascular invasion. They decided not to make a recommendation for people with T1b at low risk of cancer progression as it was less clear which treatment option would be best but made a recommendation for research to determine the effectiveness of endoscopic resection with or without adjuvant chemoradiotherapy and oesophagectomy for adults with T1b oesophageal adenocarcinoma.

Follow-up after endoscopic treatment

In the absence of evidence comparing endoscopic and radiological follow-up with standard endoscopy in people with stage 1 oesophageal adenocarcinoma, the committee drew upon their clinical experience to make a recommendation. They agreed that endoscopic follow-up is needed for people who have received endoscopic treatment for stage 1 oesophageal adenocarcinoma as the likelihood of recurrence is high. The committee noted this was in line with current practice.

Based on their clinical experience, the committee agreed that the frequency of follow-up should be based on the likelihood of recurrence. In the absence of evidence, the committee decided to make a recommendation for research to assess the optimal

frequency and duration of endoscopic follow-up for people who have received endoscopic treatment for stage 1 oesophageal adenocarcinoma.

How the recommendations might affect practice

The current recommendations are in line with current practice and therefore will not have a resource impact.

Back to recommendations

Non-surgical treatment for T1b oesophageal adenocarcinoma

Recommendations 1.7.1 and 1.7.2

Why the committee made the recommendations

In the absence of evidence to guide decision making, the committee drew upon their clinical experience to make a recommendation on non-surgical treatment for T1b oesophageal adenocarcinoma.

Using radiotherapy alone or in combination with chemotherapy to treat oesophageal adenocarcinoma is current practice.

The committee agreed that radiotherapy alone or in combination with chemotherapy would be appropriate for people with T1b oesophageal adenocarcinoma at high risk of cancer progression as it is likely to reduce the risk of recurrence. They noted that chemotherapy alone is not a definitive treatment.

Follow-up after endoscopic treatment

The committee acknowledged the absence of evidence for endoscopic and radiological follow-up in people with stage 1 oesophageal adenocarcinoma but agreed it would be usual practice to offer endoscopic follow-up to people who have received radiotherapy treatment for T1b oesophageal adenocarcinoma as the risk of cancer progression is high. The committee made a consensus recommendation based on their clinical experience.

How the recommendations might affect practice

The current recommendations are in line with current practice and therefore are unlikely to have a significant resource impact.

Back to recommendations

Anti-reflux surgery

Recommendations 1.8.1 and 1.8.2

Why the committee made the recommendations

In the absence of evidence of a clinical benefit of anti-reflux surgery to reduce progression to dysplasia or cancer, the committee agreed it should not be recommended for this reason.

Although the committee did not look for evidence on medication use for symptom control, they agreed that anti-reflux surgery can provide an alternative option for people who are intolerant to or unwilling to take acid-suppressant medication such as proton pump inhibitors (PPIs) and should be considered for this population. They decided it was useful to provide a link to the relevant recommendation in the NICE guideline on gastro-oesophageal reflux disease. In the absence of evidence, the committee agreed not to make a recommendation for anti-reflux surgery to induce remission or prevent recurrence in people with stage 1 adenocarcinoma. People who fail to respond to radiofrequency ablation (RFA) are sometimes referred for anti-reflux surgery. However, the committee noted that in such cases other ablation therapies such as argon plasma coagulation (APC) could be considered instead of anti-reflux surgery.

How the recommendations might affect practice

The current recommendations are in line with current practice and therefore will not have a resource impact.

Back to recommendations

Context

Barrett's oesophagus is a condition in which squamous cells at the lower end of the lining of the oesophagus are replaced with columnar cells. It can be a precursor to oesophageal adenocarcinoma. Barrett's oesophagus is more common in older age groups, men, people who are white and people who are overweight. The risk of progression to cancer is low. Fewer than 1% of people with Barrett's oesophagus develop oesophageal adenocarcinoma each year.

However, oesophageal adenocarcinoma has a poor prognosis because of late presentation, and its incidence is increasing possibly related to more people being overweight or obese. Effective treatments for Barrett's oesophagus could reduce the number of people presenting late with adenocarcinoma and improve overall outcomes.

NICE published a guideline on ablative therapy for Barrett's oesophagus (CG106) in 2010, which included people with high-grade dysplasia only. The British Society of Gastroenterology published guidance in 2013 on managing Barrett's oesophagus and related early neoplasia. This emphasised the importance of minimum data set reporting, including length of Barrett's segments and also the requirement that dysplasia is confirmed by 2 gastrointestinal pathologists. An update to the 2010 NICE guideline was needed because of new evidence on chemoprevention, managing Barrett's oesophagus with low-grade dysplasia and evolving practice in stage 1 adenocarcinoma.

Finding more information and committee details

To find NICE guidance on related topics, including guidance in development, see the NICE topic page on oesophageal cancer.

For full details of the evidence and the guideline committee's discussions, see the evidence reviews. You can also find information about how the guideline was developed, including details of the committee.

NICE has produced tools and resources to help you put this guideline into practice. For general help and advice on putting our guidelines into practice, see resources to help you put NICE guidance into practice.

Update information

February 2023: This guideline updates and replaces the NICE guideline on Barrett's oesophagus: ablative therapy (CG106).

ISBN: 978-1-4731-5005-8

Accreditation