NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE
Guideline
Barrett's oesophagus and stage 1 oesophageal adenocarcinoma: monitoring and management
Draft for consultation, August 2022
This guideline covers monitoring, treatment and follow-up for people aged 18 and over with Barrett's oesophagus and stage 1 oesophageal adenocarcinoma. It offers advice on endoscopic and non-endoscopic techniques.
This guideline will update NICE guideline CG106 (published August 2010).
Who is it for?
Healthcare professionals
 Adults with Barrett's oesophagus, their families and carers
What does it include?
the recommendations
 recommendations for research
 rationale and impact sections that explain why the committee made the
recommendations and how they might affect practice
 the guideline context.
Information about how the guideline was developed is on the guideline's
webpage. This includes the evidence reviews, the scope, details of the committee
and any declarations of interest.

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1 **Recommendations**

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

<u>Making decisions using NICE guidelines</u> 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.

2

- 3 The stages of cancer/oesophageal adenocarcinoma referred to in this guideline are
- 4 based on the <u>8th editions of the Union for International Cancer Control (UICC)</u>

5 <u>tumour node metastasis (TNM) classification of malignant tumours</u> and the <u>American</u>

6 Joint Committee on Cancer (AJCC) melanoma staging system.

- 7 **1.1** Information and support
- 8 1.1.1 Offer a clinical consultation to people with newly diagnosed Barrett's
 9 oesophagus to discuss risk of cancer, endoscopic surveillance plans and
 10 symptom control.
- 11 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.
- 14 1.1.3 After each surveillance procedure, provide the person with an endoscopy
 15 report that includes a lay summary of the findings and a reference to
 16 ongoing symptom control.
- 17 1.1.4 Follow the <u>recommendations on communication and information in the</u>
 18 <u>NICE guidelines on patient experience in adult NHS services</u> and <u>shared</u>
 19 <u>decision making</u>.

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

Full details of the evidence and the committee's discussion are in <u>evidence</u> <u>review N: patient information and support</u>.

1 **1.2 Pharmacological interventions**

- 1.2.1 Follow the <u>recommendations on interventions for gastro-oesophageal</u>
 <u>reflux disease in the NICE guideline on gastro-oesophageal reflux disease</u>
 <u>and dyspepsia in adults.</u>
- 5 1.2.2 Do not offer aspirin to people with Barrett's oesophagus to prevent
 6 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 <u>rationale and impact section on</u> <u>pharmacological interventions</u>.

Full details of the evidence and the committee's discussion are in <u>evidence</u> <u>review A: pharmacological interventions</u>.

7 **1.3 Endoscopic surveillance**

- 8 1.3.1 Discuss the benefits and risks of endoscopic surveillance with the person
 9 diagnosed with Barrett's oesophagus.
- 1.3.2 Offer high resolution white light endoscopy with Seattle protocol biopsies
 for surveillance of Barrett's oesophagus. Take into account the health of
- 12 the person and ensure the benefits of surveillance outweigh the risks.

13 Frequency of endoscopic surveillance

14 1.3.3 Offer high resolution white light endoscopic surveillance with Seattle15 protocol biopsies:

1	• every 2 to 3 years to people with long-segment (3 cm or longer)
2	Barrett's oesophagus

- every 3 to 5 years to people with short-segment (less than 3 cm)
 Barrett's oesophagus with intestinal metaplasia.
- 5 1.3.4 Assess a person's risk of cancer based on their age, sex, family history of
 6 oesophageal cancer and smoking history and tailor the frequency of
 7 endoscopic surveillance accordingly, within the intervals given in
 8 recommendation 1.3.3.

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

Full details of the evidence and the committee's discussion are in <u>evidence</u> <u>reviews B: white light endoscopy, C: endoscopic surveillance and E: frequency</u> and duration of endoscopic surveillance techniques.

9 **1.4** Staging for suspected stage 1 oesophageal

10 adenocarcinoma

- 11 1.4.1 Offer endoscopic resection for staging for people with suspected stage 112 oesophageal adenocarcinoma.
- 13 1.4.2 Do not use CT before endoscopic resection for staging suspected T1
 14 oesophageal adenocarcinoma.
- 15 1.4.3 Do not use endoscopic ultrasonography (EUS) before endoscopic
 16 resection for staging suspected T1a oesophageal adenocarcinoma.
- 17 1.4.4 Consider EUS for nodal staging for people with suspected T1b
- 18 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 <u>rationale and impact section on staging for</u> <u>suspected stage 1 oesophageal adenocarcinoma</u>.

Full details of the evidence and the committee's discussion are in <u>evidence</u> <u>review F: diagnostic accuracy of endoscopic and radiological staging techniques</u>.

1 1.5 Managing Barrett's oesophagus with dysplag
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- 2 1.5.1 Offer endoscopic resection of visible oesophageal lesions as first-line
 3 treatment to people with high-grade dysplasia.
- 4 1.5.2 Offer endoscopic ablation of any residual Barrett's oesophagus to people
 5 with high-grade dysplasia after treatment with endoscopic resection.
- 6 1.5.3 Offer radiofrequency ablation to people with low-grade oesophageal
 7 dysplasia diagnosed from biopsies taken at 2 separate endoscopies. Two
 8 gastrointestinal pathologists should confirm the histological diagnosis.
- 9 1.5.4 Consider endoscopic surveillance at 6 monthly intervals with dose
 10 optimisation of acid-suppressant medication for people diagnosed with
 11 indefinite dysplasia of the oesophagus.
- 12 1.5.5 Offer endoscopic follow-up to people who have received endoscopic13 treatment for Barrett's oesophagus with dysplasia.
- 14 1.5.6 See also the <u>NICE interventional procedures guidance on endoscopic</u>
- 15 radiofrequency ablation for Barrett's oesophagus with low-grade dysplasia
- 16 <u>or no dysplasia</u> and <u>epithelial radiofrequency ablation for Barrett's</u>
- 17 <u>oesophagus</u>.

For a short explanation of why the committee made these recommendations and how they might affect practice, see the <u>rationale and impact section on managing</u> <u>Barrett's oesophagus with dysplasia</u>. Full details of the evidence and the committee's discussion are in <u>evidence</u> reviews G: endoscopic treatment (low grade, indefinite dysplasia) and H: endoscopic treatment (high grade dysplasia, stage 1 adenocarcinoma).

1	1.6	Managing stage 1 oesophageal adenocarcinoma
2	1.6.1	Offer a clinical consultation to people with stage 1 oesophageal
3		adenocarcinoma to discuss and evaluate the suitability of treatment
4		options, including endoscopic resection or oesophagectomy.
5	1.6.2	Offer endoscopic resection as first-line treatment to people with T1a
6		oesophageal adenocarcinoma.
7	1.6.3	Offer endoscopic ablation of any residual Barrett's oesophagus to people
8		with T1a oesophageal adenocarcinoma after treatment with endoscopic
9		resection.
10	1.6.4	Offer endoscopic follow-up to people who have received endoscopic
11		treatment for stage 1 oesophageal adenocarcinoma.
12	1.6.5	Offer oesophagectomy to people with T1b oesophageal adenocarcinoma
13		at high risk of cancer progression (for example, incomplete endoscopic
14		resection, or evidence of lymphovascular invasion or deep submucosal
15		invasion (more than 500 micron) on histological examination of
16		endoscopic resection specimens) and who are fit for surgery.
17	1.6.6	See also the <u>NICE interventional procedures guidance on endoscopic</u>
18		submucosal dissection of oesophageal dysplasia and neoplasia.

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

Full details of the evidence and the committee's discussion are in <u>evidence</u> reviews I: oesophagectomy vs endoscopy and M: endoscopic and radiological follow-up after intervention.

1 **1.7 Non-surgical treatment for T1b oesophageal**

2 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.
- 9 1.7.2 Offer endoscopic follow-up to people who have received radiotherapy for10 T1b oesophageal adenocarcinoma.

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

Full details of the evidence and the committee's discussion are in <u>evidence</u> <u>review J: non-surgical interventions for T1b oesophageal adenocarcinoma and M:</u> <u>endoscopic and radiological follow-up after intervention.</u>

11 1.8 Anti-reflux surgery

- 12 1.8.1 Do not offer anti-reflux surgery to people with Barrett's oesophagus to13 prevent progression to dysplasia or cancer.
- 14 1.8.2 Follow the <u>recommendations on laparoscopic fundoplication for gastro-</u>
- 15 <u>oesophageal reflux disease in the NICE guideline on gastro-oesophageal</u>
 16 <u>reflux disease and dyspepsia in adults</u>.

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

Full details of the evidence and the committee's discussion are in <u>evidence</u> <u>reviews L: anti-reflux surgery to improve remission and K: anti-reflux surgery to</u> <u>reduce progression.</u>

1 Terms used in this guideline

2 This section defines terms that have been used in a particular way for this guideline.

3 Barrett's oesophagus

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

8 Stage 1 adenocarcinoma

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

11 **Recommendations for research**

12 The guideline committee has made the following recommendations for research.

13 Key recommendations for research

14 **1** Diagnostic accuracy of endoscopic surveillance

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

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

Full details of the evidence and the committee's discussion are in <u>evidence</u> review E: frequency and duration of endoscopic surveillance techniques.

1 **2** Frequency and duration of endoscopic surveillance

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

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

Full details of the evidence and the committee's discussion are in <u>evidence review</u> <u>E: frequency and duration of endoscopic surveillance techniques.</u>

5 3 Oesophagectomy

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

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

Full details of the evidence and the committee's discussion are in <u>evidence</u> <u>review I: oesophagectomy.</u>

9 **4 Endoscopic treatments**

- 10 For adults with Barrett's oesophagus with dysplasia or stage 1 oesophageal
- 11 adenocarcinoma, what is the effectiveness of different endoscopic ablation
- 12 techniques alone or in combination with endoscopic resection?

For a short explanation of why the committee made the recommendation for research, see the <u>rationale sections on managing Barrett's oesophagus with</u> dysplasia and managing stage 1 oesophageal adenocarcinoma.

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

1 5 Frequency and duration of endoscopic follow-up

- 2 What is the optimal frequency and duration of endoscopic follow-up for patients who
- 3 have received endoscopic treatment for Barrett's oesophagus with dysplasia and
- 4 stage 1 oesophageal adenocarcinoma?

For a short explanation of why the committee made the recommendation for research, see the <u>rationale sections on managing Barrett's oesophagus with</u> dysplasia and managing stage 1 oesophageal adenocarcinoma.

Full details of the evidence and the committee's discussion are in <u>evidence</u> review M: endoscopic and radiological follow-up after intervention.

5 Rationale and impact

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

8 Information and support

9 Recommendations 1.1.1 to 1.1.4

10 Why the committee made the recommendations

- 11 Qualitative evidence highlighted knowledge gaps and uncertainties at the time of
- 12 diagnosis of Barrett's oesophagus. The committee emphasised this reflected their
- 13 experience with people they see in clinical practice. They agreed a clinical
- 14 consultation should be offered following diagnosis to provide information and support
- 15 on the risk of progression to cancer and symptom control, and general information
- 16 about endoscopic surveillance.
- 17 Providing information both verbally and in written form is helpful as information can
- 18 be difficult to grasp at a single consultation and written information will enable people
- 19 to revisit the information when needed. This should include general information
- 20 about the diagnosis of Barrett's oesophagus, available treatments and any patient
- 21 support groups.

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

4 How the recommendations might affect practice

- 5 The recommendations are in line with current practice and therefore are unlikely to
- 6 have a substantial resource impact.
- 7 Return to recommendations

8 Pharmacological interventions

9 Recommendations 1.2.1 to 1.2.2

10 Why the committee made the recommendations

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

16 The committee agreed there was insufficient evidence to recommend aspirin to 17 prevent progression to oesophageal dysplasia and cancer. There were more serious 18 adverse events with aspirin compared to no aspirin, although the effect was not 19 clinically important. The committee noted this was in line with their clinical 20 experience and knowledge that bleeding is more likely to be seen in people treated 21 with aspirin. They agreed that the lack of a clinically important effect shown in 22 adverse events could be attributed to a protective effect from PPIs taken by people 23 in both the aspirin and no aspirin study groups. For this reason, they made a do not 24 offer recommendation for aspirin.

- 25 Although the committee did not look for evidence on medication use for symptom
- 26 control, they agreed that acid-suppressant medication such as PPIs are highly
- 27 effective and widely used in current practice to control symptoms of gastro-
- 28 oesophageal reflux disease in people with Barrett's oesophagus. They decided it

- 1 was useful to provide a link to the relevant section of the NICE guideline on gastro-
- 2 oesophageal reflux disease.

3 How the recommendations might affect practice

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

8 Endoscopic surveillance

9 Recommendations 1.3.1 to 1.3.4

10 Why the committee made the recommendations

- 11 Based on clinical experience and evidence showing that endoscopic surveillance
- 12 using high resolution white light was effective in reducing mortality, the committee
- 13 agreed it should be offered to people with Barrett's oesophagus provided the
- 14 person's general health is adequate, and the benefits of surveillance outweigh the
- 15 risks. The committee noted this is the current standard of care for endoscopic
- 16 surveillance for Barrett's oesophagus.
- 17 The committee agreed that the risk of complications of endoscopic surveillance
- 18 should be considered on an individual basis because the frequency and
- 19 consequences of complications will vary depending on a range of factors, including
- 20 age and medical comorbidities. It was agreed that possible complications should be
- 21 discussed with the person with Barrett's oesophagus.
- 22 Evidence for electronic and conventional chromoendoscopy techniques (including
- 23 narrow band imaging, acetic acid, methylene blue) as well as endoscopic brushing
- 24 was obtained from people with dysplasia and early-stage cancer. This means that
- these techniques have not been validated in an unselected population undergoing
- standard endoscopic surveillance and therefore could not be recommended. <u>A</u>
- 27 recommendation for research was made to assess the effectiveness of these
- 28 techniques for surveillance of Barrett's oesophagus.

1 Frequency and duration of endoscopic surveillance

- 2 There was no evidence to support an optimal frequency for endoscopic surveillance
- 3 as this will differ according to individual risk factors. However, the committee agreed
- 4 to make a recommendation for frequency of surveillance based on length of
- 5 segment, in line with the British Society of Gastroenterology (BSG) guidelines and
- 6 current practice in the UK.
- 7 The committee agreed that the frequency of surveillance should be tailored to each
- 8 person based on a clinical assessment of their risk of cancer, with length of segment,
- 9 being the factor most closely linked to risk of cancer, but age, sex, family history of
- 10 oesophageal cancer and smoking also being important.
- 11 There was no evidence on the duration of endoscopic surveillance and the
- 12 committee agreed not to make a recommendation on this.
- 13 The committee emphasised that evidence of clinical and molecular biomarkers
- 14 associated with a greater risk of progression to dysplasia or cancer could inform
- 15 setting appropriate intervals for endoscopic surveillance and agreed to make a
- 16 <u>recommendation for research on biomarkers</u>.

17 Non-endoscopic surveillance techniques (no recommendations)

- 18 There was evidence of benefit for using cytosponge to detect dysplasia and cancer
- 19 but the quality was not sufficient to support a recommendation for its use at present.
- 20 Balloon brushing is an old technique that is not currently used in clinical practice.
- 21 Limited evidence on cytology obtained from balloon brushing showed it could detect
- 22 oesophageal dysplasia and adenocarcinoma, but the committee agreed there was
- 23 insufficient evidence to recommend its use in clinical practice.
- 24 There was a lack of evidence on other non-endoscopic surveillance techniques and
- 25 based on their clinical experience, the committee agreed it was not appropriate to
- 26 recommend them.

27 How the recommendations might affect practice

- 28 Endoscopic surveillance is widely used for monitoring people with Barrett's
- 29 oesophagus. Adherence to the biopsy protocols requires additional procedure time

- 1 beyond that of a standard endoscopy, but many services have already increased the
- 2 time allocation for Barrett's surveillance and overall resource impact is not expected
- 3 to be significant.

4 Back to recommendations

5 Staging for suspected stage 1 oesophageal adenocarcinoma

6 Recommendations 1.4.1 to 1.4.4

7 Why the committee made the recommendations

- 8 In the absence of evidence on endoscopic staging techniques, the committee drew
- 9 upon their clinical experience to inform decision making. They agreed that
- 10 endoscopic resection should be offered to people with suspected stage 1
- 11 oesophageal adenocarcinoma as it is the most accurate staging technique and is the
- 12 gold standard in current practice as recommended by the British Society of
- 13 Gastroenterology (BSG) guidelines.
- 14 Limited evidence indicated poor diagnostic accuracy of CT as a staging technique for
- 15 early stage oesophageal adenocarcinoma because the resolution of CT is
- 16 inadequate in detecting very small tumours and small volume lymph node
- 17 metastasis. Therefore, there was consensus that CT should not be used before
- 18 endoscopic resection for staging suspected T1 oesophageal adenocarcinoma.
- 19 Limited evidence on the mini-probe endoscopic ultrasonograph (mini-probe EUS)
- 20 and the conventional radial endoscopic ultrasonograph (crEUS) showed they cannot
- 21 distinguish well between T1a and T1b tumours but can detect lymph node
- 22 metastasis with greater accuracy. Based on the evidence and their clinical
- 23 experience, the committee agreed that EUS should not be used before endoscopic
- 24 resection for staging suspected T1a oesophageal adenocarcinoma, as this carries a
- 25 negligible risk of lymph node metastasis.
- 26 EUS should be considered when an oesophageal lesion is suspected to be T1b
- 27 cancer based on endoscopic appearances, for example sessile lesions with
- 28 significant luminal component (Paris 0-Is) or depressed lesions (Paris 0-IIc). It should
- also be considered for people with confirmed T1b oesophageal adenocarcinoma,

- 1 who have a significant risk of lymph node metastasis and may benefit from additional
- 2 oncological treatment, such as radiotherapy alone or in combination with
- 3 chemotherapy.

4 How the recommendations might affect practice

- 5 These recommendations are in line with current practice and therefore will not have
- 6 a resource impact.
- 7 Back to recommendations

8 Managing Barrett's oesophagus with dysplasia

9 Recommendations 1.5.1 to 1.5.6

10 Why the committee made the recommendations

- 11 The evidence showed that endoscopic treatment using a combination of endoscopic
- 12 resection and endoscopic ablation or endoscopic ablation alone is effective to treat
- 13 people with high-grade dysplasia and prevent progression to adenocarcinoma.
- 14 Based on clinical experience the committee recommended that high-grade dysplasia
- 15 be endoscopically resected, when oesophageal lesions are visible at endoscopy,
- 16 and the residual Barrett's oesophagus be treated with endoscopic ablation.
- 17 The evidence indicated that both radiofrequency ablation (RFA) and argon plasma
- 18 coagulation (APC) are effective in reducing the risk of recurring oesophageal lesions
- 19 in people who have received an endoscopic resection for high-grade dysplasia.
- 20 However, the committee noticed that for very long segment Barrett's oesophagus
- 21 RFA might be more practical than APC, which has a significantly smaller ablation
- 22 catheter than RFA. Given that there is no evidence of superiority of one ablation
- 23 technique over the other, the committee agreed <u>further research was needed to</u>
- 24 <u>determine the most effective endoscopic ablation technique to use and made a</u>
- 25 <u>recommendation for research</u>.
- 26 Evidence showed that RFA in people with confirmed low-grade oesophageal
- 27 dysplasia protects from progression to high-grade dysplasia or cancer. The
- 28 committee noted this was in line with their experience and that low-grade dysplasia
- 29 is primarily managed by RFA in current practice.

1 Based on their clinical experience, the committee emphasised that for RFA to be 2 offered, evidence of low-grade dysplasia from biopsies from 2 separate endoscopies 3 and confirmation of the diagnosis by 2 gastrointestinal pathologists should be 4 present. They noted this was in line with current practice where RFA takes place in 5 specialist centres by endoscopists with appropriate experience and would not be 6 considered in cases where there is evidence of low-grade oesophageal dysplasia 7 from biopsies from only 1 endoscopy or where there is no confirmation by a second 8 gastrointestinal pathologist.

9 There is currently insufficient evidence to support use of other ablation techniques10 for treating low-grade dysplasia.

11 In the absence of clinical evidence on people with indefinite dysplasia of the

12 oesophagus, the committee drew on their clinical experience to make a

13 recommendation for this population. They emphasised that the risk of progression to

14 high-grade oesophageal dysplasia or cancer is around 3 to 5 times higher than the

15 risk in the non-dysplastic population and therefore endoscopic surveillance every 6

16 months would be appropriate. The committee also noted, based on their clinical

17 experience, that indefinite dysplasia is often linked to excessive inflammation of the

18 oesophagus, therefore optimisation of acid-suppressant medication is appropriate.

19 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 followup is needed for people who have received endoscopic treatment for Barrett's oesophagus with dysplasia as the likelihood of recurrence is high. The committee

25 noted this was in line with current practice.

26 Based on their clinical experience, the committee agreed that the frequency of

27 follow-up should be based on the likelihood of recurrence. In the absence of

28 evidence, the committee decided to make a recommendation for research to assess

29 <u>the optimal frequency and duration of endoscopic follow-up for people</u> who have

30 received endoscopic treatment for Barrett's oesophagus with dysplasia

1 How the recommendations might affect practice

- 2 These recommendations are in line with current practice and therefore will not have
- 3 a resource impact.
- 4 Back to recommendations

5 Managing stage 1 oesophageal adenocarcinoma

6 Recommendations 1.6.1 to 1.6.6

7 Why the committee made the recommendations

8 The quality of the evidence was limited but reflected the committee's clinical 9 experience that endoscopic resection and oesophagectomy are equally effective for 10 treating stage 1 adenocarcinoma, and oesophagectomy is associated with a higher 11 incidence of serious adverse events. There was a lack of evidence on how the 2 12 treatments affect quality of life so the committee drew on their own experience to 13 consider this. As part of standard practice a clinical consultation would be offered to 14 the person to discuss the treatment options and the advantages and disadvantages 15 of both approaches.

- 16 Endoscopic resection is less invasive and has fewer complications than
- 17 oesophagectomy. The committee agreed that even after successful endoscopic
- 18 treatment there remains a risk of recurrence of Barrett's oesophagus and
- 19 oesophageal neoplasia. Therefore, endoscopic treatment comes with a greater need
- 20 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
- 22 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

1 in people who have received an endoscopic resection for T1a adenocarcinoma.

- 2 However, the committee noticed that for very long segment Barrett's oesophagus
- 3 RFA might be more practical than APC, which has a significantly smaller ablation
- 4 catheter than RFA. Given that there is no evidence of superiority of one technique
- 5 over the other, the committee agreed <u>further research was needed to determine the</u>
- 6 <u>most effective endoscopic ablation technique to use and made a recommendation</u>
- 7 for research.
- 8 The lack of specific evidence for people with T1b oesophageal adenocarcinoma was 9 a concern for the committee who agreed this is where there is the most uncertainty 10 over appropriate treatment. In the absence of evidence, the committee decided to 11 make a recommendation to offer oesophagectomy rather than endoscopic resection 12 for people with T1b oesophageal adenocarcinoma at high risk of cancer progression. 13 This was based on their clinical experience that there is a greater risk of local 14 recurrence in cases of incomplete endoscopic resection and a high risk of lymph 15 node metastasis in cases with deep submucosal invasion (more than 500 micron) 16 and lymphovascular invasion. They decided not to make a recommendation for 17 people with T1b at low risk of cancer progression as it was less clear which 18 treatment option would be best but made a recommendation for research to 19 determine the effectiveness of endoscopic resection with or without adjuvant 20 chemoradiotherapy and oesophagectomy for adults with T1b oesophageal 21 adenocarcinoma.
- 22 Follow-up after endoscopic treatment
- 23 In the absence of evidence comparing endoscopic and radiological follow-up with
- standard endoscopy in people with stage 1 oesophageal adenocarcinoma, the
- 25 committee drew upon their clinical experience to make a recommendation. They
- agreed that endoscopic follow-up is needed for people who have received
- 27 endoscopic treatment for stage 1 oesophageal adenocarcinoma as the likelihood of
- 28 recurrence is high. The committee noted this was in line with current practice.
- 29 Based on their clinical experience, the committee agreed that the frequency of
- 30 follow-up should be based on the likelihood of recurrence. In the absence of
- 31 evidence, the committee decided to make a recommendation for research to assess

- 1 <u>the optimal frequency and duration of endoscopic follow-up</u> for people who have
- 2 received endoscopic treatment for stage 1 oesophageal adenocarcinoma.

3 How the recommendations might affect practice

- 4 The current recommendations are in line with current practice and therefore will not
- 5 have a resource impact.
- 6 Back to recommendations

7 Non-surgical treatment for T1b oesophageal adenocarcinoma

8 Recommendation 1.7.1 to 1.7.2

9 Why the committee made the recommendations

- 10 In the absence of evidence to guide decision making, the committee drew upon their
- 11 clinical experience to make a recommendation on non-surgical treatment for T1b
- 12 oesophageal adenocarcinoma.
- Using radiotherapy alone or in combination with chemotherapy to treat oesophagealadenocarcinoma is current practice.
- 15 The committee agreed that radiotherapy alone or in combination with chemotherapy 16 would be appropriate for people with T1b oesophageal adenocarcinoma at high risk
- 17 of cancer progression as it is likely to reduce the risk of recurrence. They noted that
- 18 chemotherapy alone is not a definitive treatment.

19 Follow-up after endoscopic treatment

- 20 The committee acknowledged the absence of evidence for endoscopic and
- 21 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
- 23 received radiotherapy treatment for T1b oesophageal adenocarcinoma as the risk of
- 24 cancer progression is high. The committee made a consensus recommendation
- 25 based on their clinical experience.

26 How the recommendations might affect practice

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

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1 Back to recommendations

2 Anti-reflux surgery

3 Recommendation 1.8.1 to 1.8.2

4 Why the committee made the recommendations

5 In the absence of evidence of a clinical benefit of anti-reflux surgery to reduce

6 progression to dysplasia or cancer, the committee agreed it should not be

7 recommended for this reason.

- 8 Although the committee did not look for evidence on medication use for symptom
- 9 control, they agreed that anti-reflux surgery can provide an alternative option for
- 10 people who are intolerant to or unwilling to take acid-suppressant medication such
- 11 as proton pump inhibitors (PPIs) and should be considered for this population. They
- 12 decided it was useful to provide a link to the relevant recommendation in the NICE
- 13 guideline on gastro-oesophageal reflux disease.
- 14 In the absence of evidence, the committee agreed not to make a recommendation
- 15 for anti-reflux surgery to induce remission or prevent recurrence in people with stage
- 16 1 adenocarcinoma. People who fail to respond to radiofrequency ablation (RFA) are
- 17 sometimes referred for anti-reflux surgery. However, the committee noted that in
- 18 such cases other ablation therapies such as argon plasma coagulation (APC) could
- 19 be considered instead of anti-reflux surgery.

20 How the recommendations might affect practice

- 21 The current recommendation is in line with current practice and therefore will not
- 22 have a resource impact.

23 Back to recommendations

Finding more information and committee details

- 25 To find NICE guidance on related topics, including guidance in development, see the
- 26 NICE topic page on oesophageal cancer.
- 27 For details of the guideline committee see the <u>committee member list</u>.

1 [After consultation the editor will expand this section to include additional links]

2 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.

9 However, oesophageal adenocarcinoma has a poor prognosis because of late

10 presentation, and its incidence is increasing possibly related to more people being

11 overweight or obese. Effective treatments for Barrett's oesophagus could reduce the

12 number of people presenting late with adenocarcinoma and improve overall

- 13 outcomes.
- 14 NICE published a guideline on ablative therapy for Barrett's oesophagus (CG106) in
- 15 2010, which included people with high-grade dysplasia only. The British Society of
- 16 Gastroenterology published guidance in 2013 on managing Barrett's oesophagus
- 17 and related early neoplasia. This emphasised the importance of minimum data set
- 18 reporting, including length of Barrett's segments and also the requirement that
- 19 dysplasia is confirmed by 2 gastrointestinal pathologists. An update to the 2010
- 20 NICE guideline was needed because of new evidence on chemoprevention,
- 21 managing Barrett's oesophagus with low-grade dysplasia and evolving practice in
- 22 stage 1 adenocarcinoma.

23 Update information

This guideline is an update of NICE guideline CG106 (August 2010) and will replaceit.

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