Cancer of the upper aerodigestive tract: assessment and management in people aged 16 and over

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NICE guideline

Draft for consultation, March 2018

This guideline covers This guideline covers assessing and managing cancers of the upper aerodigestive tract in young people (aged 16 and over) and adults. It aims to reduce variation in practice and improve survival.

Who is it for?

- People aged 16 and over with cancer of the upper aerodigestive tract, and their families and carers
- Healthcare professionals working in secondary and tertiary care

We have reviewed the evidence and added new recommendations on managing nodal metastasis after chemoradiotherapy in people with head and neck cancer. You are invited to comment on the new recommendations. These are marked as [2018].

We have not updated recommendations shaded in grey, and cannot accept comments on them. In some cases, we have made minor wording changes for clarification.

See <u>update information</u> for a full explanation of what is being updated.

This version of the guideline contains:

- the draft recommendations
- rationale and impact sections that explain why the committee made the 2018 recommendations and how they might affect practice.
- the guideline context

• recommendations for research.

Full details of the evidence and the committee's discussion on the 2018 recommendations is in the <u>evidence review</u>. Evidence for the 2016 recommendations is in the <u>full version</u> of the 2016 guideline.

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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>your care</u>.

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.

1.1 Information and support

Information needs

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- 1.1.1 For people with cancer of the upper aerodigestive tract and their carers:
- provide consistent information and support at diagnosis
 - review their needs throughout the care pathway including at the end of treatment
 - tailor information and support to the person's needs (including the benefits and side effects of treatment, psychosocial and long-term functional issues). [2016]
- 1.1.2 Give people contact details for their allocated key worker, in line with the

 NICE service guidance on <u>improving outcomes in head and neck cancer</u>

 and recommendations of the <u>Quality Surveillance Programme</u>. [2016]
 - 1.1.3 Give people details of peer support services that can help them throughout their care pathway. [2016]
- 16 1.1.4 Offer information about human papillomavirus (HPV) to people with HPV-related cancer of the upper aerodigestive tract. **[2016]**

Smoking cessation

19 1.1.5 Inform patients and carers at the point of diagnosis about how continuing to smoke adversely affects outcomes such as:

1 2 3		 treatment-related side effects risk of recurrence risk of second primary cancers. [2016]
4 5	1.1.6	Offer help to people to stop smoking, in line with the NICE guideline on stop smoking services . [2016]
6		1.2 Investigation
7	Assessm	ent of neck lumps
8 9 10	1.2.1	Consider adding ultrasound-guidance to fine-needle aspiration cytology or core biopsy for people with a neck lump that is suspected of being cancer of the upper aerodigestive tract. [2016]
11 12	1.2.2	Consider having a cytopathologist or biomedical scientist assess the cytology sample adequacy when the procedure is carried out. [2016]
13	Identifyin	g the occult primary
14 15 16 17	1.2.3	Consider a fluorodeoxyglucose positron emission tomography (FDG PET)-CT scan as the first investigation to detect the primary site in people with metastatic nodal squamous cell carcinoma of unknown origin that is thought to arise from the upper aerodigestive tract. [2016]
18 19 20	1.2.4	Consider using narrow-band imaging endoscopy to identify a possible primary site when it has not been possible to do so using FDG PET-CT. [2016]
21	1.2.5	Offer a biopsy to confirm a possible primary site. [2016]
22 23	1.2.6	Offer surgical diagnostic assessment if FDG PET-CT does not identify a possible primary site. This may include:
24		guided biopsies
25		• tonsillectomy
26		tongue base mucosectomy. [2016]

1	1.2.7	Consider an MRI or CT scan before diagnostic surgery to help with
2		radiotherapy treatment planning. [2016]
0		to size as a such a local discussion
3	Clinical s	taging – who and how?
4	1.2.8	Offer systemic staging (see recommendations 1.2.9–1.2.11) to all people
5		with cancer of the upper aerodigestive tract except those with T1N0 or
6		T2N0 disease. [2016]
7	1.2.9	Offer FDG PET-CT to people with T4 cancer of the hypopharynx or
8		nasopharynx. [2016]
9	1.2.10	Offer FDG PET-CT to people with N3 cancer of the upper aerodigestive
10	1.2.10	tract. [2016]
10		
11	1.2.11	Offer conventional imaging (for example, chest CT) to people with cancer
12		of the upper aerodigestive tract who require systemic staging (see
13		recommendation 1.2.8) but FDG PET-CT is not indicated for them. [2016]
14		1.3 Treatment of early stage disease
14		1.3 Treatment of early stage disease
14 15	Squamou	1.3 Treatment of early stage disease us cell carcinoma of the larynx
	Squamou	, ,
15	_	is cell carcinoma of the larynx
15 16 17	_	os cell carcinoma of the larynx Offer transoral laser microsurgery to people with newly-diagnosed T1a squamous cell carcinoma of the glottic larynx. [2016]
15 16 17 18	1.3.1	Offer transoral laser microsurgery to people with newly-diagnosed T1a squamous cell carcinoma of the glottic larynx. [2016] Offer a choice of transoral laser microsurgery or radiotherapy to people
15 16 17 18 19	1.3.1	Offer transoral laser microsurgery to people with newly-diagnosed T1a squamous cell carcinoma of the glottic larynx. [2016] Offer a choice of transoral laser microsurgery or radiotherapy to people with newly-diagnosed T1b–T2 squamous cell carcinoma of the glottic
15 16 17 18	1.3.1	Offer transoral laser microsurgery to people with newly-diagnosed T1a squamous cell carcinoma of the glottic larynx. [2016] Offer a choice of transoral laser microsurgery or radiotherapy to people
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15 16 17 18 19 20 21 22	1.3.1 1.3.2 1.3.3	Offer transoral laser microsurgery to people with newly-diagnosed T1a squamous cell carcinoma of the glottic larynx. [2016] Offer a choice of transoral laser microsurgery or radiotherapy to people with newly-diagnosed T1b–T2 squamous cell carcinoma of the glottic larynx. [2016] Offer a choice of transoral surgery or radiotherapy to people with newly-diagnosed T1–T2 squamous cell carcinoma of the supraglottic
15 16 17 18 19 20 21 22 23	1.3.1 1.3.2 1.3.3	Offer transoral laser microsurgery to people with newly-diagnosed T1a squamous cell carcinoma of the glottic larynx. [2016] Offer a choice of transoral laser microsurgery or radiotherapy to people with newly-diagnosed T1b–T2 squamous cell carcinoma of the glottic larynx. [2016] Offer a choice of transoral surgery or radiotherapy to people with newly-diagnosed T1–T2 squamous cell carcinoma of the supraglottic larynx. [2016]

cancer (T1-T2, N0). [2016]

1	1.3.5	Offer sentinel lymph node biopsy instead of elective neck dissection to
2		people with early oral cavity cancer (T1-T2, N0), unless they need
3		cervical access at the same time (for example, free-flap reconstruction).
4		[2016]
5	Squamou	is cell carcinoma of the oropharynx (T1–2, N0)
6	1.3.6	Offer people the choice of transoral surgical resection or primary
7		radiotherapy for T1–2 N0 tumours of the oropharynx. [2016]
8	1.3.7	Consider postoperative radiotherapy, with or without concomitant
9		chemotherapy, for T1–2 N0 tumours of the oropharynx if pathologically
10		adverse risk factors have been identified. [2016]
11		1.4 Treatment of advanced disease
12	Squamou	is cell carcinoma of the larynx
13	1.4.1	Offer people with T3 squamous cell carcinoma of the larynx a choice of:
14		radiotherapy with concomitant chemotherapy, or
15		surgery with adjuvant radiotherapy, with or without concomitant
16		chemotherapy. [2016]
17	1.4.2	Discuss the following with people with T3 squamous cell carcinoma of the
18		larynx and their carers, to inform their choice of treatment:
19		the potential advantages of laryngeal preservation
20		 the risk of needing salvage laryngectomy (and its associated
21		complications)
22		 the benefits of primary surgery in people with existing compromised
23		swallowing and airway function
24		 likely voice and swallowing function after treatment (including the need
25		for a long-term feeding tube). [2016]
26	1.4.3	For people with T4a squamous cell carcinoma of the larynx consider
27		surgery with adjuvant radiotherapy, with or without concomitant
28		chemotherapy. [2016]

1	Squamous cell carcinoma of the hypopharynx		
2 3 4 5	1.4.4	Offer larynx-preserving treatment to people with locally-advanced squamous cell carcinoma of the hypopharynx if radiation and neo-adjuvant and/or concomitant chemotherapy would be suitable for them and they do not have:	
6		a tumour related dyenhogic needing a feeding tube	
6 7 8		 tumour-related dysphagia needing a feeding tube a compromised airway recurrent aspiration pneumonias. [2016] 	
9 10	1.4.5	Offer radiotherapy with neo-adjuvant and/or concomitant chemotherapy if larynx-preserving treatment is suitable for the person. [2016]	
11 12	1.4.6	Offer primary surgery followed by adjuvant radiotherapy to people if chemotherapy is not a suitable treatment for them. [2016]	
13 14	1.4.7	Offer adjuvant radiotherapy to people having surgery as their primary treatment. Add concomitant chemotherapy if appropriate. [2016]	
15	Palliation	of breathing difficulties	
16 17	1.4.8	Identify people at risk of airways obstruction for whom intervention is appropriate. Think about:	
18		their performance status	
19		 treatment side effects and length of hospital stay 	
20 21		involving the palliative care team and other specialists when appropriate. [2016]	
22	1.4.9	Consider endoluminal debulking in preference to tracheostomy. [2016]	
23 24	1.4.10	Establish a management plan if surgical intervention is not appropriate, in conjunction with the person, carers and clinical staff. [2016]	
25 26	1.4.11	Assess and treat other causes of breathlessness in people with incurable upper aerodigestive tract cancer. [2016]	

1		1.5 Response assessment after chemoradiotherapy
2	1.5.1	Offer FDG PET-CT to guide management for people treated with radical
3		chemoradiotherapy ¹ who have:
4		an oropharyngeal primary cancer site and
5		• 2 or more positive nodes in the neck, all of which are less than 6 cm
6		across. [2018]
7	1.5.2	Consider FDG PET-CT to guide management for people treated with
8		radical chemoradiotherapy who have:
9		an oropharyngeal primary site with 1 positive node in the neck that is
10		less than 6 cm across or
11		 an oropharyngeal primary site with 1 or more positive nodes larger than
12		6 cm across in the neck or
13		 a hypopharyngeal or laryngeal primary site with 1 or more positive
14		nodes in the neck. [2018]
15	1.5.3	For people having an FDG PET-CT scan after chemoradiotherapy,
16		perform the scan 3 to 6 months after chemoradiotherapy has finished.
17		[2018]
18	1.5.4	Do not offer neck dissection to people with no abnormal FDG uptake or
19		residual soft tissue mass on an FDG PET-CT scan. [2018]

To find out why the committee made the 2018 recommendations on response assessment after chemoradiotherapy and how they might affect practice, see rationale and impact.

¹ The term 'radical chemoradiotherapy' refers to treatment aiming to cure cancer rather than to relieve symptoms (palliative treatment). It is used here to reflect the evidence these recommendations are based on.

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1	1.6	HPV-related disease

2	HPV testi	ng
3	1.6.1	Test all squamous cell carcinomas of the oropharynx using p16
4		immunohistochemistry. Regard the p16 test result as positive only if there
5		is strong nuclear and cytoplasmic staining in more than 70% of tumour
6		cells. [2016]
7	1.6.2	Consider high-risk HPV DNA or RNA in-situ hybridisation in all
8		p16-positive cancers of the oropharynx to confirm HPV status. [2016]
9	De-intens	sification of treatment
10	1.6.3	Do not offer de-intensification of curative treatment to people with
11		HPV-positive cancer of the oropharynx, unless it is part of a clinical trial.
12		[2016]

1.7 Less common upper aerodigestive tract cancers

14	Carcinom	na of the nasopharynx
15	1.7.1	Offer intensity-modulated radiation therapy with concomitant
16		chemotherapy to people with locally-advanced (stage II and above)
17		nasopharyngeal cancer. [2016]
18	1.7.2	Consider adjuvant or neo-adjuvant chemotherapy for people with
19		locally-advanced (stage II and above) nasopharyngeal cancer. [2016]
20	Carcinom	na of the paranasal sinuses
21	1.7.3	Offer surgery as the first treatment for carcinoma of the paranasal sinuses
22		if complete resection is possible. [2016]
23	1.7.4	Consider radiotherapy with or without concomitant chemotherapy before
24		planned surgical resection of the paranasal sinuses if complete resection
25		is not initially possible. [2016]

1	Unknown	primary of presumed upper aerodigestive tract origin
2	1.7.5	Offer people with squamous cell carcinoma in the cervical lymph nodes
3		with an unknown primary the choice of:
4		 neck dissection and adjuvant radiation with or without chemotherapy, or
5		 primary radiation with or without chemotherapy, with surgery for
6		persistent disease. [2016]
7	1.7.6	Consider no further treatment as an option in people with pN1 disease
8		without extracapsular spread after neck dissection. [2016]
9	1.7.7	Consider including potential primary tumour sites when selecting the
9 10	1.7.7	volume to be treated with radiotherapy. [2016]
10		volume to be treated with radiotherapy. [2010]
11	Mucosal	melanoma
12	1.7.8	Consider surgery and adjuvant radiotherapy for people with
13		newly-diagnosed upper aerodigestive tract mucosal melanoma without
14		systemic metastases. [2016]
15		1.8 Optimising rehabilitation and function
15		1.8 Optimising rehabilitation and function
15 16	Enteral n	1.8 Optimising rehabilitation and function utrition support
	Enteral n 1.8.1	
16		utrition support
16 17		utrition support Assess people's need for enteral nutrition at diagnosis, including
16 17 18 19		utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account:
16 17 18 19		utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account: • performance status and social factors
16 17 18 19 20 21		 utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account: performance status and social factors nutritional status (weight loss, high or low BMI, ability to meet estimated
16 17 18 19 20 21		 utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account: performance status and social factors nutritional status (weight loss, high or low BMI, ability to meet estimated nutritional needs)
16 17 18 19 20 21 22 23		 utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account: performance status and social factors nutritional status (weight loss, high or low BMI, ability to meet estimated nutritional needs) tumour stage
16 17 18 19 20 21 22 23		 utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account: performance status and social factors nutritional status (weight loss, high or low BMI, ability to meet estimated nutritional needs) tumour stage tumour site
16 17 18 19 20 21 22 23 24		utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account: • performance status and social factors • nutritional status (weight loss, high or low BMI, ability to meet estimated nutritional needs) • tumour stage • tumour site • pre-existing dysphagia
16 17 18 19 20 21 22 23 24 25 26		 utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account: performance status and social factors nutritional status (weight loss, high or low BMI, ability to meet estimated nutritional needs) tumour stage tumour site pre-existing dysphagia impact of planned treatment (such as radiation treatment volume and
16 17 18 19 20 21 22 23 24		utrition support Assess people's need for enteral nutrition at diagnosis, including prophylactic tube placement. The multidisciplinary team should take into account: • performance status and social factors • nutritional status (weight loss, high or low BMI, ability to meet estimated nutritional needs) • tumour stage • tumour site • pre-existing dysphagia

1 2	1.8.2	Follow the recommendations in NICE's guideline on <u>nutrition support for</u> <u>adults</u> for people aged 18 years and over. [2016]
3	Speech a	nd language therapy interventions
4 5	1.8.3	Consider swallowing-exercise programmes for people having radiotherapy. [2016]
6 7	1.8.4	Consider mouth-opening exercises for people having radiotherapy who are at risk of reduced mouth opening. [2016]
8 9	1.8.5	Consider voice therapy for people whose voice has changed because of their treatment. [2016]
10	Shoulder	rehabilitation
11 12	1.8.6	Consider progressive resistance training for people with impaired shoulder function, as soon as possible after neck dissection. [2016]
13		1.9 Follow-up of people with cancer of the upper
14		aerodigestive tract and management of
15		osteoradionecrosis
16	Follow-up	3
17 18 19	1.9.1	Ensure people with cancer of the upper aerodigestive tract and their carers have tailored information about the symptoms of recurrence and late effects of treatment at the end of curative therapy. [2016]
20 21 22	1.9.2	Consider structured, risk-adapted follow-up using locally-agreed protocols for people who have had curative treatment for cancer of the upper aerodigestive tract. Use the follow-up protocols to:
		 help improve quality of life, including discussing psychosocial issues
23 24 25		 detect disease recurrence or second primary cancer, possibly including narrow-band imaging to improve detection. [2016]

1	Management of osteoradionecrosis
2	1.9.3 Consider surgery to remove necrotic bone and to establish soft tissue
3	coverage in people with osteoradionecrosis. [2016]
4	1.9.4 Only consider hyperbaric oxygen therapy or medical management for
5	treating osteoradionecrosis as part of a clinical trial. [2016]
6	Stages of upper aerodigestive tract cancer
7	The stages of upper aerodigestive tract cancer referred to in this guideline are listed
8	below.
9	• T0: this means there is no primary tumour, but there may be abnormal cells that
10	are precancerous.
11 12	 T1 to T4: this refers to the increasing size and/or extent of the primary tumour, with 1 being smallest and 4 largest.
13	N0: no lymph nodes contain cancer cells.
14	N1 and upwards: increasing involvement of lymph nodes by cancer cells.
15	Recommendations for research
16	The 2016 guideline committee made the following recommendations for research,
17	marked [2016]. The guideline committee's full set of research recommendations is
18	detailed in the <u>full guideline</u> .
19	As part of the 2018 update, the standing committee made the following research
20	
	recommendations, marked [2018]. Full details can be found in the <u>evidence review</u> .
21	recommendations, marked [2018]. Full details can be found in the <u>evidence review</u> . 1 Indeterminate FDG PET-CT after radical chemoradiotherapy: long
21 22	
	1 Indeterminate FDG PET-CT after radical chemoradiotherapy: long
22 23	1 Indeterminate FDG PET-CT after radical chemoradiotherapy: long term outcomes
22	1 Indeterminate FDG PET-CT after radical chemoradiotherapy: long term outcomes What are the long-term outcomes for people with an indeterminate FDG PET-CT
22 23 24	1 Indeterminate FDG PET-CT after radical chemoradiotherapy: long term outcomes What are the long-term outcomes for people with an indeterminate FDG PET-CT scan result (no abnormal FDG uptake or residual mass) after radical
22 23 24 25	1 Indeterminate FDG PET-CT after radical chemoradiotherapy: long term outcomes What are the long-term outcomes for people with an indeterminate FDG PET-CT scan result (no abnormal FDG uptake or residual mass) after radical chemoradiotherapy?

- 1 on long-term follow-up for people with negative disease and persistent nodes on
- 2 FDG PET-CT scan. Research to investigate long-term outcomes could improve
- 3 clinical outcomes and efficient use of resources. Randomised controlled trials or
- 4 prospective cohort studies would be used to answer this research question.
- 5 Outcomes of interest include recurrence rates, overall survival, quality of life, surgical
- 6 complications, and adverse events. [2018]

7 2 Indeterminate FDG PET-CT after radical chemoradiotherapy:

8 investigations

- 9 What are the most appropriate investigations for people with an indeterminate FDG
- 10 PET-CT scan result (no abnormal FDG uptake or residual mass) after radical
- 11 chemoradiotherapy?

12 Why this is important

- 13 People with indeterminate FDG PET-CT results receive neck dissection surgery
- 14 according to current practice in the UK. However, there is no standardised practice
- on long-term follow-up for people with negative disease and persistent nodes on
- 16 FDG PET-CT scan. Research to investigate appropriate investigations could improve
- 17 clinical outcomes and efficient use of resources. Randomised controlled trials or
- 18 prospective cohort studies would be used to answer this research question.
- 19 Investigations include interval FDG PET-CT, ultrasound with or without biopsy, multi-
- 20 parametric MRI, and serial imaging. [2018]

21 3 Management of nodal metastasis in nasopharynx cancer after

22 chemoradiotherapy

- 23 What is the optimal management strategy of nodal metastasis in nasopharynx
- 24 cancer after chemoradiotherapy?

Why this is important

- 26 There is evidence that FDG PET-CT is cost saving, prevents unnecessary surgeries
- 27 and reduces recurrence and overall mortality compared with neck dissection surgery
- in people who have received chemoradiotherapy. However, the evidence is only for
- 29 people with oropharyngeal, laryngeal and hypopharyngeal cancer and there is no
- 30 evidence on people with nasopharynx cancer. Natural history and response to

- 1 treatment of cervical nodal metastases from nasopharynx primary sites are different,
- 2 in terms of their impact on prognosis (TNM 7 cancer staging manual), and
- 3 nasopharynx cancer is highly sensitive to radiotherapy and should not be treated by
- 4 neck dissection (PET-NECK NIHR report). Research to investigate the optimal
- 5 management of nodal metastasis in people with primary nasopharynx cancer after
- 6 chemoradiotherapy could improve clinical outcomes and the use of resources.
- 7 Outcomes of interest include recurrence rates, overall survival, quality of life, surgical
- 8 complications, and adverse events. [2018]

9 4 Effectiveness of FDG PET-CT to guide follow-up

- 10 What is the effectiveness and cost-effectiveness of using FDG PET-CT to guide
- 11 follow-up after treatment for people with head and neck cancer?

12 Why this is important

- 13 There is evidence that FDG PET-CT is cost saving, prevents unnecessary surgeries
- 14 and has similar results for recurrence and overall mortality compared with neck
- dissection surgery in people with oropharyngeal, laryngeal and hypopharyngeal
- 16 cancer who have received chemoradiotherapy. However, there is no evidence on
- 17 FDG PET-CT for follow-up after other head and neck cancer treatments. Research
- 18 to investigate the effectiveness of FDG PET-CT to guide follow-up could improve
- 19 clinical outcomes and the use of resources. Outcomes of interest include recurrence
- 20 rates, overall survival, and quality of life. [2018]

5 Systemic imaging – who and why?

- What factors determine the risk of a person presenting with CUADT having
- 23 metastasis or a second primary cancer?

Why this is important

- 25 Outcomes of interest include prevalence, predictive value and how the abnormalities
- 26 identified influence patient management. The presence of metastasis or a
- 27 synchronous second primary cancer at presentation is rare in patients with CUADT.
- 28 Subgroups of patients have been identified in whom the risk is clearly elevated.
- However, it is not clear at which level of risk detailed staging investigations are
- 30 justified and the impact the results of these would have on decision making by the

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1 clinicians and the patient. Health economic modelling is needed to inform this 2 process. [2016] 6 HPV testing 3 4 What is the comparative effectiveness of single-step laboratory diagnostic tests to 5 identify human papillomavirus (HPV) against current diagnostic test algorithms and 6 reference standards in people with cancer of the oropharynx? 7 Why this is important 8 Outcomes of interest are sensitivity, specificity and resource use. HPV testing is 9 currently recommended in cancer of the oropharynx because it has significant 10 prognostic implication. Current methods use a 2-step procedure that is not widely 11 available in all treatment centres. A single-step test is likely to be more widely 12 adopted and could have significant budgetary implications for the NHS. The study 13 should also consider the prognostic value and the economic benefits of novel tests. 14 [2016] 7 Unknown primary of presumed upper aerodigestive tract origin 15 16 In people with CUADT of unknown primary, can radiotherapy target volumes be 17 selected based on clinical and pathological factors? 18 Why this is important 19 Outcomes of interest include local control, progression-free survival, overall survival, 20 and treatment-related morbidity and mortality. In a very small percentage of patients 21 with squamous carcinoma involving a cervical lymph node the primary site remains 22 occult despite intensive investigations. The optimum treatment for these patients is 23 uncertain. Some clinical teams will treat the neck disease alone and others will treat 24 some or all potential primary sites with the radiotherapy with or without

chemotherapy. The latter strategy is associated with a high level of side effects that

may have lifelong consequences, for example xerostomia. A better understanding of

the clinic-pathological factors associated with treatment outcomes would improve

treatment selection with the potential to reduce these side effects. [2016]

8 Enteral	nutrition	support	t
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- 2 What specific clinical and non-clinical factors allow risk stratification when selecting
- which people with CUADT would benefit from short- or long-term enteral nutrition?

4 Why this is important

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- 5 Outcomes of interest include resource use, morbidity of tube placement, duration of
- 6 enteral feeding and nutritional status. There are no nationally agreed selection
- 7 criteria for the type of feeding tube placed at diagnosis for people who need enteral
- 8 nutrition support during curative treatment. Variation across the UK exists as a result
- 9 of clinician-led practices and local policy. The systematic review by NICE in 2015
- 10 found some evidence but no specific list was identified because of limitations with
- study design, and inability to stratify clinical and non-clinical factors meaningfully.
- 12 These factors included restricted populations for tumour staging, patient
- demographics, treatment plan and intent, definitions of malnutrition, timing and
- method of tube placement, and duration of enteral nutrition. [2016]

9 Follow-up

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- 16 What is the optimal method, frequency and duration of follow-up for people who are
- 17 disease-free after treatment for CUADT?

Why this is important

- 19 Outcomes of interest include quality of life, local control and overall survival. The
- 20 optimal methods, frequency, and duration of follow-up in people who are clinically
- 21 disease-free and who have undergone treatment for squamous cell cancer of the
- 22 upper aerodigestive tract with curative intent are not known. Considerable resources
- are expended throughout the country on the follow-up of people who have completed
- 24 potentially curative treatment. Local follow-up protocols are based more on historical
- practice than evidence and are often disease- rather than patient-centred. Research
- to investigate how and when follow-up should optimally be carried out could improve
- 27 clinical outcomes and the use of resources. [2016]

Rationale and impact

2	Response	assessment	after	chemor	radiothera	ap	V
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3 Section 1.5

- 4 Why the committee made the recommendations
- 5 Overall, the evidence showed that recurrence rates and overall mortality for FDG
- 6 PET-CT-guided management after radical chemoradiotherapy were similar to those
- 7 for neck dissection. In addition, the evidence showed that FDG PET-CT was cost
- 8 saving compared with neck dissection, and would prevent unnecessary surgeries,
- 9 surgical complications, and adverse events.
- 10 The committee agreed to make recommendations only for people with
- oropharyngeal, laryngeal and hypopharyngeal primary sites, because these were the
- main focus of the evidence. Most of the people in the studies had an oropharyngeal
- primary site and 1 or more positive nodes under 6 cm across in the neck, and the
- 14 evidence was strongest for this population. Therefore, the committee agreed that
- they should be offered an FDG PET-CT scan.
- 16 The evidence was weaker for people with an oropharyngeal primary site and more
- severe disease (1 or more positive node larger than 6 cm across in the neck) and for
- people with laryngeal or hypopharyngeal primary sites. To reflect this, FDG PET-CT
- 19 scanning could be considered for these groups.
- 20 The evidence did not include people with an oropharyngeal primary site and less
- 21 severe disease (only 1 positive node of less than 6 cm across). However, the
- 22 committee agreed that it is particularly important that FDG PET-CT scans are
- considered for this population to avoid unnecessary surgery. These people are likely
- to be at a lower risk of recurrence and so the benefits of neck dissection are lower.
- 25 The committee noted that new classifications for head and neck cancer (TNM
- 26 classification of malignant tumours, 8th edition) have been introduced, which are
- 27 different to those used in the evidence. They decided to describe the stage of cancer
- 28 for these recommendations in terms of the number and size of positive nodes to
- 29 avoid confusion.

- 1 The timing of FDG PET-CT scans (3 to 6 months after completion of radical
- 2 chemoradiotherapy) is in line with current Royal College of Radiologists guidelines.
- 3 Earlier scans are more likely to give a false-positive result, due to the residual effects
- 4 of treatment.
- 5 The committee decided to be specific that neck dissection should not be offered to
- 6 people with no abnormal FDG uptake or residual soft tissue mass, to give clear
- 7 advice about how to interpret a 'negative' FDG PET-CT result.
- 8 The committee noted several areas in which future research would be helpful, such
- 9 as management for people with indeterminate test results (see research
- 10 <u>recommendations 1 and 2</u>), the role of FDG PET-CT for people with nasopharyngeal
- 11 cancer (see <u>research recommendation 3</u>) and the effectiveness of FDG PET-CT to
- 12 guide follow-up (see <u>research recommendation 4</u>).

13 How the recommendations might affect practice

- 14 There may an increase in the number of FDG PET-CT scans performed and a
- reduction in surgical procedures. However, the evidence showed that the amount of
- money saved from unnecessary surgery is likely to be considerably higher than the
- 17 cost of the additional scans.

20

- 18 Full details of the evidence and the committee's discussion are in evidence review A:
- 19 Evidence reviews for treatment of advanced disease.

Putting this guideline into practice

- [This section will be finalised after consultation]
- 22 NICE has produced tools and resources [link to tools and resources tab] to help you
- 23 put this guideline into practice.
- 24 Putting recommendations into practice can take time. How long may vary from
- 25 guideline to guideline, and depends on how much change in practice or services is
- 26 needed. Implementing change is most effective when aligned with local priorities.
- 27 Changes recommended for clinical practice that can be done quickly like changes
- in prescribing practice should be shared quickly. This is because healthcare

- 1 professionals should use guidelines to guide their work as is required by
- 2 professional regulating bodies such as the General Medical and Nursing and
- 3 Midwifery Councils.
- 4 Changes should be implemented as soon as possible, unless there is a good reason
- 5 for not doing so (for example, if it would be better value for money if a package of
- 6 recommendations were all implemented at once).
- 7 Different organisations may need different approaches to implementation, depending
- 8 on their size and function. Sometimes individual practitioners may be able to respond
- 9 to recommendations to improve their practice more quickly than large organisations.
- Here are some pointers to help organisations put NICE guidelines into practice:
- 1. Raise awareness through routine communication channels, such as email or
- 12 newsletters, regular meetings, internal staff briefings and other communications with
- all relevant partner organisations. Identify things staff can include in their own
- 14 practice straight away.
- 15 2. **Identify a lead** with an interest in the topic to champion the guideline and motivate
- others to support its use and make service changes, and to find out any significant
- 17 issues locally.
- 18 3. Carry out a baseline assessment against the recommendations to find out
- whether there are gaps in current service provision.
- 4. Think about what data you need to measure improvement and plan how you
- 21 will collect it. You may want to work with other health and social care organisations
- 22 and specialist groups to compare current practice with the recommendations. This
- 23 may also help identify local issues that will slow or prevent implementation.
- 24 5. **Develop an action plan**, with the steps needed to put the guideline into practice,
- and make sure it is ready as soon as possible. Big, complex changes may take
- longer to implement, but some may be quick and easy to do. An action plan will help
- in both cases.

- 1 6. For very big changes include milestones and a business case, which will set out
- 2 additional costs, savings and possible areas for disinvestment. A small project group
- 3 could develop the action plan. The group might include the guideline champion, a
- 4 senior organisational sponsor, staff involved in the associated services, finance and
- 5 information professionals.
- 6 7. **Implement the action plan** with oversight from the lead and the project group.
- 7 Big projects may also need project management support.
- 8 8. **Review and monitor** how well the guideline is being implemented through the
- 9 project group. Share progress with those involved in making improvements, as well
- 10 as relevant boards and local partners.
- 11 NICE provides a comprehensive programme of support and resources to maximise
- 12 uptake and use of evidence and guidance. See our into practice pages for more
- 13 information.
- 14 Also see Leng G, Moore V, Abraham S, editors (2014) Achieving high quality care –
- 15 practical experience from NICE. Chichester: Wiley.

16 Context

- 17 Upper aerodigestive tract cancers are found at various sites in the airways of the
- head and neck: the oral cavity, oropharynx, nasopharynx, hypopharynx, larynx and
- 19 nasal sinuses. The majority are squamous cell cancers. The major risk factors for
- 20 upper aerodigestive tract squamous cell cancer in the UK are tobacco smoking and
- 21 alcohol consumption.
- There is currently variation or uncertainty in the investigations used to assess neck
- 23 lumps; who needs systemic staging, the most effective treatment for early stage and
- 24 advanced disease, how to best identify HPV-positive disease, how to optimise
- 25 function and rehabilitation, the most effective follow-up and the management of
- 26 osteoradionecrosis of the jaw. This guideline aims to make recommendations that
- 27 address these areas of variation/uncertainty.
- 28 This guideline will cover adults and young people (16 years and older):

- referred from primary care with suspected cancer of the upper aerodigestive tract
- with newly-diagnosed or recurrent cancer of the upper aerodigestive tract.
- 3 It will not cover:
- adults and young people with cancers of the thyroid, orbit, middle ear, cutaneous
- 5 lip, skull base or salivary gland
- adults and young people with sarcoma or lymphoma
- children and young people under 16 years.
- 8 Since publication, new evidence was identified on the use of FDG PET-CT scanning
- 9 to inform decisions about surgery for nodal metastases after radical
- 10 chemoradiotherapy. This less invasive approach to management has the potential to
- 11 reduce unnecessary surgery for people with locally advanced head and neck cancer.
- 12 In 2018 we reviewed this evidence and added new recommendations.

13 More information

You can also see this guideline in the NICE pathway on <u>upper aerodigestive tract</u> cancer.

To find out what NICE has said on topics related to this guideline, see our web page on head and neck cancers.

14 Update information

- 15 New recommendations have been added for managing nodal metastasis after
- 16 chemoradiotherapy in people with head and neck cancer.
- 17 Recommendations are marked as [2018] if the recommendation is new or the
- 18 evidence has been reviewed.
- 19 Where recommendations are shaded in grey and end [2016], the evidence has not
- 20 been reviewed since the original guideline.
- 21 See also the original NICE guideline and supporting documents.

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