West Yorkshire & Harrogate Cancer Alliance

Guidelines on Indications for Thyroid Surgery, Prophylactic Level 6 and Radioiodine plus follow-up of low risk differentiated thyroid cancer

Updated April 2017

Version 2.0

i Document Control

Title	Guidelines on Indications for Thyroid Surgery, Prophylactic Level 6 and Radioiodine plus follow-up of low risk differentiated thyroid cancer (Summary of BTA 2014 Guidelines)
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Owner	West Yorkshire & Harrogate Cancer Alliance

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1.0	March 2015	Final first version
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Contributors to current version		
Contributor	**Author/Editor**	**Section/Contribution**
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Justin Murphy		Review and Update

ii Information Reader Box

Title	Guidelines on Indications for Thyroid Surgery, Prophylactic Level 6 and Radioiodine plus follow-up of low risk differentiated thyroid cancer **(Summary of BTA 2014 Guidelines)**
Author(s)	Dr G Gerrard, Dr V Gill, Mr A Nicolaides
Review Date	April 2017
Sign off Date	25th May 2017 - Signed off by the West Yorkshire Thyroid Cancer Group with representatives from: Airedale NHS Foundation Trust Bradford Teaching Hospitals NHS Foundation Trust Calderdale & Huddersfield NHS Foundation Trust Harrogate and District NHS Foundation Trust Leeds Teaching Hospitals NHS Trust Mid Yorkshire Hospitals NHS Trust York Teaching Hospitals NHS Foundation Trust
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Proposed Target Audience for Consultation / Final Statement	WY&H CA Thyroid/Head & Neck MDT Teams WY&H CA Lead Nurses WY&H Cancer Managers WY & H Lead Cancer Commissioners
Proposed Circulation List for Final Statement	All WY&H Cancer Alliance guidelines will be made available electronically on the Wakefield CCG website (until the WY&H CA website is up and running). No hard copies will be supplied.
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1 Introductions

There are no RCTs & the evidence is weak so consider the risks & benefits of treatment for each patient depending on risk factors present & other variables

2 What surgery to do if FNAC is Thy5 / PTC?:

Diagnostic lobectomy: If US suggests <4cm size tumour and no other concerning features.

Total thyroidectomy: if:
- > 4cm
- Multifocal/ Bilateral
- Extrathyroidal extension- if possible to see on US
- Involved lymph nodes

3 Who needs completion thyroidectomy after diagnostic lobectomy?

3.1 Papillary microcarcinoma (cancer of **10mm or less**)

Completion after lobectomy?
Yes if:
- multifocal and involving both lobes (on US)
- Extrathyroidal extension
- LNs involved
- family history
- unfavourable histology
- discovered by PET (PET positive)

3.2 Papillary thyroid cancer **(> 10mm)**

Completion after lobectomy?
Yes if:
Tumour > 4cm in size
Or any size and
- multifocal or bilateral
- Extrathyroidal extension (pT3 or pT4)
- Node positive
- Family history
- Unfavourable histopath (tall cell/ columnar/ diffuse sclerosing/ poorly differentiated)

- Metastatic disease

1-4 cm Vascular invasion in medium/ big vessels (but evidence unclear - MDT review/discuss)
>45years old: Personalised decision making
Any age: < 2cm no other risk factors- probably no further surgery
>45yrs: 2 - 4cm- patient discussion

3.3 Follicular thyroid cancer

Completion after lobectomy?
Yes if:
Tumour >4cm in size
1 - 4cm in size and any of:
- patient >45yrs
- Widely invasive
- Mets- LN or distant
- Vascular invasion in medium/ big vessels
- Extrathyroidal extension

3.4 Minimally invasive FTC

Completion after lobectomy?
Yes if:
>4cm
Any size and vascular invasion
>45yrs- personalised decision making if 2 – 4cm (& no vascular invasion)

3.5 Hurthle cell tumours

Completion after lobectomy?
Yes if:
> 1cm in size
(consider if anything unusual when <1cm)

4 When to recommend a level 6 prophylactic central compartment LN dissection:

(I.e. no clinical or radiological evidence of disease in level 6).

Personalised decision making.
Consider if have:

- adverse histological subtype
- Tumour >4cm in size
- Extrathyroidal extension
- Patient > 45 years old

5 What Follow-up is needed if no completion after lobectomy?

a) Tumour equal to or <1cm:	No follow-up if initial neck US OK Target TSH: low normal if patient needs thyroxine. GP to check TSH annually-risk of hypothyroidism
b) Tumour >1cm & no radioiodine planned:	Neck US,Tg & TSH follow-up (under surgeons or endocrinologists) – suggest 6 monthly Tg & annual neck US for 1st 3 to 5 years. Target TSH: low normal & may need to start thyroxine if TSH > 2

Consider the ION trial if eligible

6.1 Papillary thyroid cancer

Recommend RI?
No if:
Tumour <1cm- unifocal or multifocal (no other adverse features)

Yes if:
Tumour > 4cm in size, gross extrathyroidal extension or distant mets

Recommendations can't be made for or against radioiodine if:
1 – 4 cm but
consider if:
any size and any of:
- Extrathyroidal extension (thyroid capsule invasion)
- Less favourable histology- (tall cell/ columnar/ diffuse sclerosing/ poorly differentiated)
- Involved lymph nodes – particularly if large size, many nodes involved or ECS

What to do with nodal micromets? Personalised decision making based on other risk factors

6.2 Follicular thyroid cancer

Recommend RI?
Yes if:
Tumour >4cm in size, gross extrathyroidal extension or distant mets

Recommendations can't be made for or against radioiodine if:
1 – 4 cm but
consider if:
any size and any of:
- Extrathyroidal extension
- Widely invasive
- Vascular invasion
- Involved lymph nodes

6.3 Hurthle cell

Consider RI?
Yes if:

Tumour >1cm in size