

Thyroid cancer: radioactive iodine treatment during COVID-19 pandemic (v3 Sep 2020)

Now that we are a few months in to the COVID-19 pandemic and have a greater understanding of the disease and its trajectory we have updated our guidance on RAI treatment. It is anticipated that the pandemic will result in services being disrupted for many months to come.

We have written the following guidance taking in to account both the risk patients face from cancer and from COVID-19 infection.

We recommend that radioactive iodine treatments can continue provided the local prevalence of COVID-19 is low and there is the appropriate infrastructure, staffing and COVID-19 testing available.

We appreciate there will be challenges in delivering a RAI service uniformly across the UK due to the differences in COVID-19 prevalence and its impact on local cancer centres so there will be inevitable variation in RAI services.

To reduce the risk of COVID-19 infection manifesting in the peri-RAI period:

- Consider self-isolation for the patient for 14 days before RAI treatment is due to be given. Other members of the household do not need to self isolate but should maintain excellent hand hygiene and aim to follow social distancing measures when away from the home. If the patient or any household member develops any symptoms suggestive of COVID-19 they should contact their thyroid cancer doctor as soon as convenient to discuss if any additional measures are required.
- Consider COVID-19 screening swab 48 (possibly 24-72) hours, depending on local laboratory turnaround time, before rhTSH administration or 48 (possibly 24-72) hours before admission if undergoing thyroid hormone withdrawal (THW). If COVID-19 swab positive defer RAI until patient COVID-19 negative
- These recommendations will continue to be reviewed and updated in line with UK guidance on COVID-19 testing

Low iodine diet

- Preparation to continue as per usual local practice

rhTSH (recombinant human TSH, Thyrogen™) preparation

- Continue as per usual practice if administered in the hospital setting
- For cancer centres covering a large geographic area that usually utilise community/district nurses for rhTSH administration, there may be difficulty accessing community rhTSH administration during the COVID-19 pandemic. In this setting there may be an opportunity to admit the patient two days earlier than the treatment date to allow for administering rhTSH in the hospital isotope room. This will avoid the patient having to undertake additional long distance travel ahead of their admission.

Inpatient stay

- Each centre will need to assess their current protocols for reviewing patients in their inpatient isotope room to take into account the potential for COVID-19 symptoms to manifest. The risk of COVID-19 symptoms developing in this setting will however be very small due to the self-isolation and baseline negative COVID-19 swab
- Consideration needs to be given at a local level to the post treatment imaging and discharge transport requirements
- On discharge, patient needs to have a letter with details on their treatment and radiation restrictions taking into account the potential scenario for subsequent admission with COVID-19 whilst still radioactive.
- For patients with young children: there may be greater difficulty for families to undertake the necessary radiation protection measures during lockdown as there may now be restrictions on the patient or child/children being in separate accommodation due to local COVID-19 restrictions regarding movement, hubs and bubbles. Consider radiation protection measures in context with the latest government advice on social distancing.

Day case treatment

Subject to radiation protection risk assessment it is possible to deliver 1.1GBq I131 on a day case basis. This has the advantage of avoiding an inpatient stay and where feasible may also allow increased capacity whilst a backlog of patients is treated. It is recommended that similar precautions are taken to minimise the risk of COVID19 infection around the time of treatment.

Low-risk patients: (adjuvant setting)

- A delay in RAI of up to 6 months is not expected to alter prognosis from DTC.

High-risk patients (metastatic disease)

- The risk/benefit scenario in these clinical situations are harder to determine.
- This cohort are likely to have longer radiation protection restrictions following RAI and may also be at higher risk for more severe COVID-19 infection. With the self-isolation period ahead of RAI treatment and the requirement for a negative COVID-19 screening swab before treatment, the risk of the patient falling ill with COVID-19 whilst radioactive is minimised.

The recommendations have taken in to account discussions amongst UK thyroid cancer clinicians as well as general COVID-19 oncological advice at local and national levels.

Professor Jon Wadsley

Dr Laura Moss