

The use of a Thyroid telephone clinic (TTC) to follow up thyroid function tests (TFTs) in patients treated with radio-iodine (RAI) for thyrotoxicosis

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Background:

The thyroid telephone clinic (TTC) was established to facilitate rapid decision making on timing of introduction of anti-thyroidals or L-thyroxine replacement therapy post RAI so avoiding unnecessary outpatient appointments or leaving patients with untreated hyperthyroidism or hypothyroidism. The TTC is also used to monitor TFTs during pregnancy and to dose-titrate treatment of unstable hypo- or hyperthyroid patients.

Eligibility:

This service is provided to patients who speak English fluently, and are able to safely follow instructions regarding medication changes, can be contacted by telephone, and commit to regular blood tests, either at the hospital phlebotomy department or locally.

Local protocol for patients going for RAI therapy:

Prior to RAI therapy, anti-thyroidal drugs should be stopped for at least a week prior to RAI therapy and only restarted where required. Our protocol is to perform TFTs at weeks 1,3,6,9,12,24 post RAI, with additional TFTs requested if required. Results are reviewed through the TTC with outpatient review at week 18-21 post RAI.

TTC is delivered run by the senior endocrine Specialist Registrar with consultant endocrinologist cover and the clinic runs every Friday with a list of 15-25 patients.

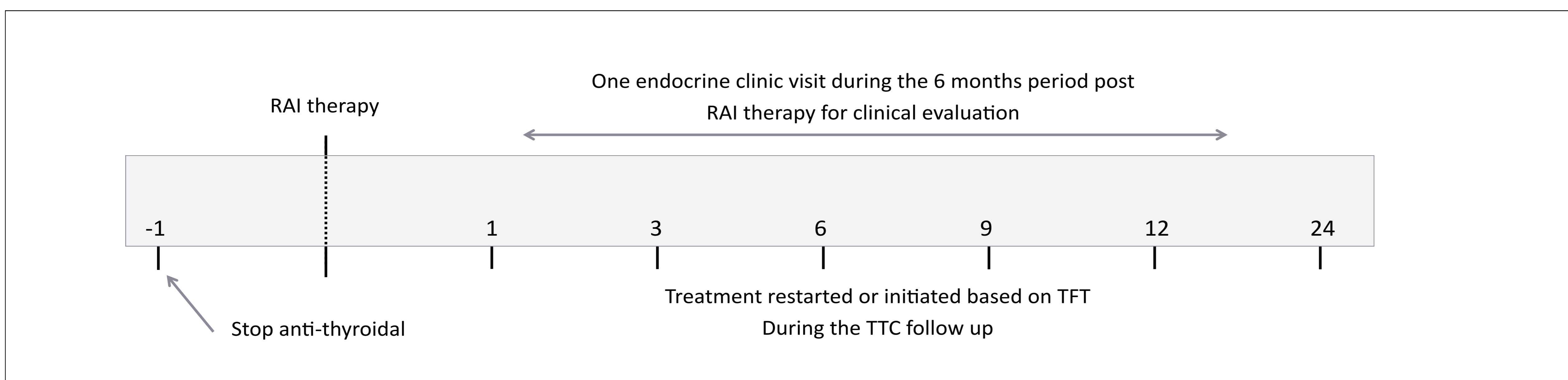


Figure 1: Summary of the protocol for patients going for RAI therapy.

92 patients who received RAI therapy were followed in the TTC between January 2012 and June 2017. 40/92 patients did not miss any blood test or phone call, as shown in figures (2 and 3), the average free T4 and TSH were smooth over 24 weeks post RAI therapy. TTC has an important role to avoid unnecessary outpatient appointments and avoids leaving patients with untreated hypothyroidism, which has many undesirable effects.

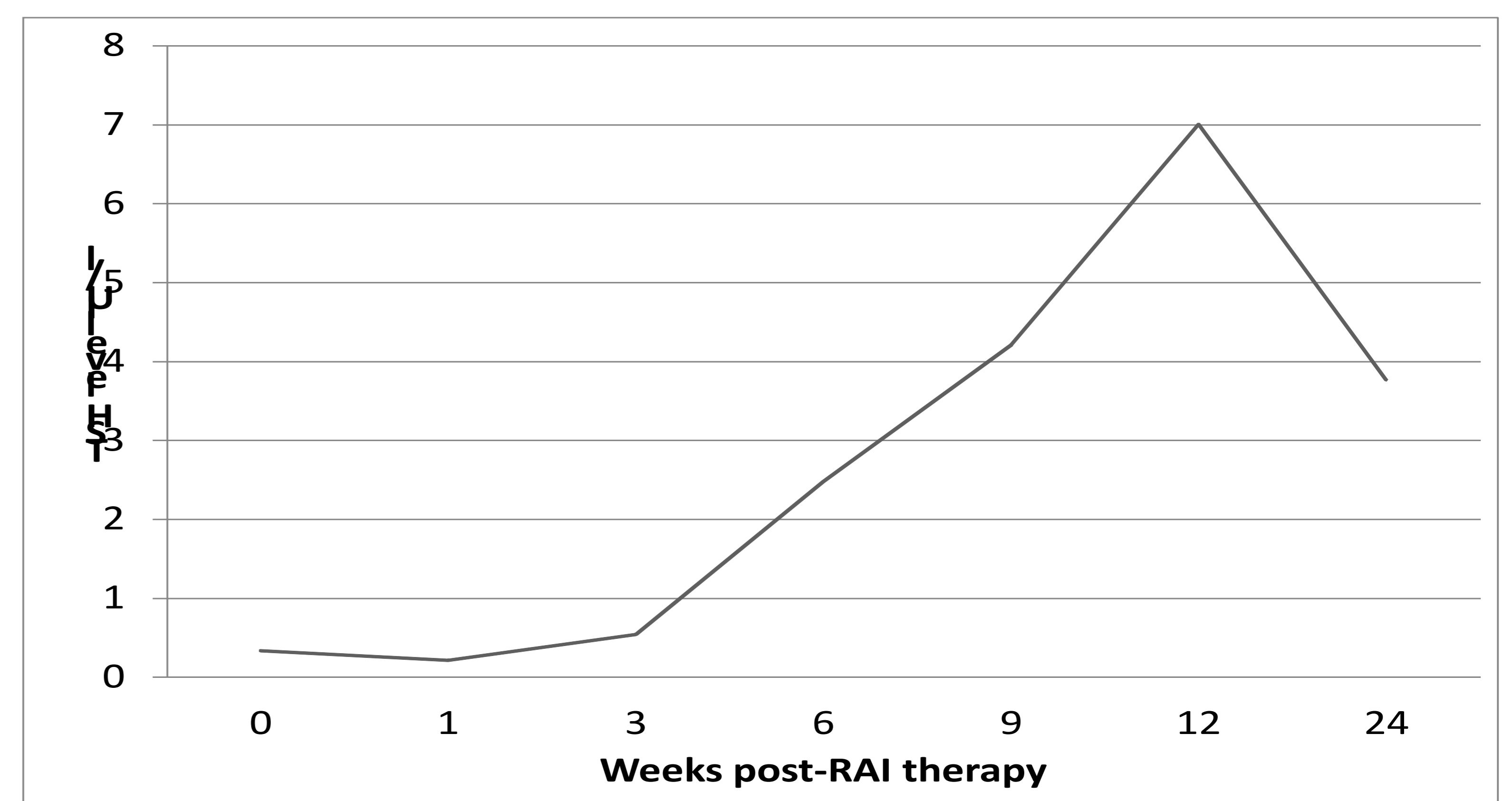
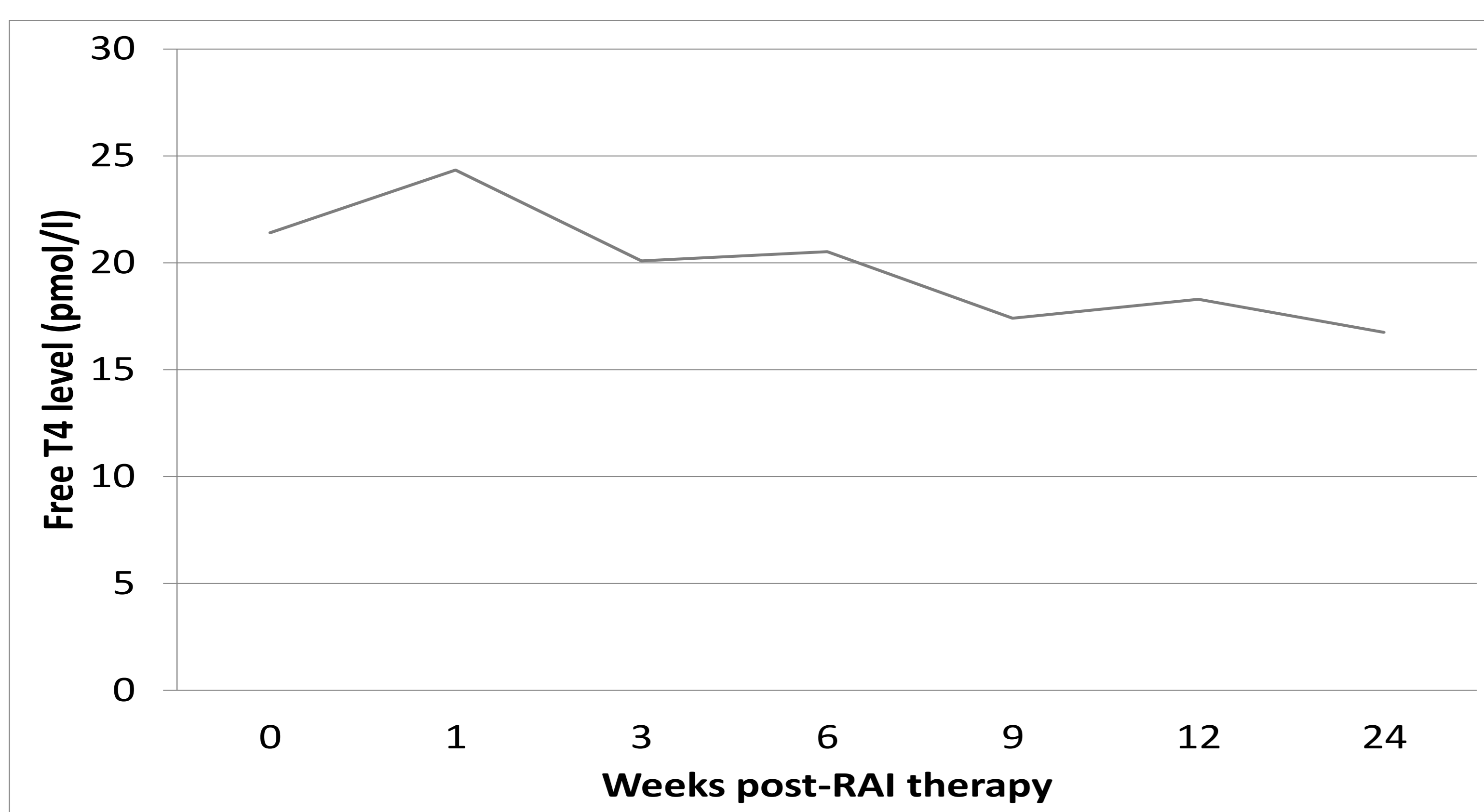


Figure 2 and 3: TSH and free T4 levels post RAI therapy for the patients followed in TTC

References:

- 1) Ross DS (2011) Radioiodine Therapy for Hyperthyroidism. *N Engl J Med* 364(6): 542-550.