Introducing Radioactive Iodine Therapy for Differentiated Thyroid Cancers to Usmanu Danfodiyo University Teaching Hospital (UDUTH)

Abstract

Unlike many cancers, thyroid cancer is potentially curable if the diagnosis is made early enough and the right combination of treatment is available to the patient. A combination of total thyroidectomy followed by radioactive iodine ablative therapy and thyroid stimulating hormone (TSH) suppression has been demonstrated to result in the best possible outcome. This combination of treatment is not available on a consistent and affordable basis to Nigerian patients.

The main purpose of this project is to acquire new skills in advanced radioactive iodine (RAI) treatment for differentiated thyroid cancer in order to commission these treatment services at the newly installed Nuclear Medicine Unit within Usmanu Danfodiyo University Teaching Hospital (UDUTH) in Sokoto, Nigeria.

With Stellenbosch University/Tygerberg hospital and sister institution (university of Cape Town/Groote Schuur Hospital) as training sites, I intend to dedicate the fellowship period of one month to partake in; imaging evaluation and patient preparation for Iodine-131 therapy, multidisciplinary thyroid cancer meetings, clinical integration of imaging and blood test results to determine a patient’s risk stratification and the appropriate doses(s) of Iodine-131, treatment administration, post-therapy imaging, and follow-up practices in out-patient clinics.

At the end of the fellowship, I am expected to acquire the following transferrable skills; Cross-sectional imaging (CT and MRI), use of I-123/I-131 whole-body scintigraphy and PET/CT in evaluation, staging and risk stratification of thyroid cancer patients, appropriate dosimetric approach in thyroid cancer management, thyroid stimulating hormone (TSH) suppression methods in thyroid cancer management and Multidisciplinary approach to thyroid cancer management. These skills will be incorporated into routine operations at the newly established Nuclear Medicine unit at UDUTH, upon return.