

CHAPTER 5

5.1 CONCLUSION

Diseases of the thyroid gland are common in primary care medicine and most can be diagnosed and treated satisfactorily by the primary care physician. In some instances thyroid disease may present in patients in a subtle manner and these clinical signs and symptoms are often mistaken for the natural course of ageing especially when they manifest in the elderly. It is for this reason that a correct diagnosis is imperative. Correct diagnosis of thyroid disease enables the clinician to effectively manage the patient and thus vastly improve the patient's quality of life. The importance of the use of correct thyroid function tests are not only required for the diagnosis of the condition but also for the long-term management of the patient. It is a fundamental tool in monitoring patient response to treatment as well as guiding the clinician with regard to dose titration.

Discovery Health published evidence-based guidelines in March 2003 in order to educate the clinician with regard to the correct use of thyroid function tests in order to diagnose thyroid disease (Guidelines, 2003). The ordering patterns of specific tests as well as combination tests were analysed for a period prior to publication of the guidelines as well as for a period after the guidelines had been published. Anecdotal evidence suggests that tests have been ordered indiscriminately by clinicians leading to unnecessary expenditure on the part of the patient. There was, however, a significant change in the ordering patterns of laboratory investigations once the article had been published. Tests that were non-specific for the initial diagnosis of suspected thyroid disease were not being requested as frequently as before. Tests that were specific and served to confirm the diagnosis of thyroid disease were requested at an increased frequency.

In South Africa, there are no specific guidelines available to guide the clinician in the investigation of suspected thyroid disease and the publication of the evidence-based guidelines by Discovery Health in order to curb the unnecessary requests for incorrect thyroid function tests has proved to be effective. The presentation of thyroid disease in patients leads to a significant decline in quality of life. Thyroid

function tests are often quite expensive and in most instances the cost is borne by the patient. Correct ordering of thyroid function tests prevents the unnecessary use of valuable resources available to the patient for health care. It is the patient who should reap the benefits of the implementation of these guidelines by clinicians.

5.2 LIMITATIONS OF THE STUDY

1. An evaluation could only be made with regard to the tests that were ordered. Reference could not be made to any clinical diagnosis arrived at as there is no way of retrieving diagnostic information from the database.
2. The ability to arrive at a diagnosis would have further enhanced the study in terms of being able to comment on specific thyroid function tests used for specific thyroid disorders and the changes in ordering patterns once the guidelines had been published.
3. Drugs used to treat specific disorders of the thyroid gland though available on the database could not be used in order to pinpoint whether testing was done for either suspected hyperthyroidism or hypothyroidism. This is due to specific instances where previously hyperthyroid patients when treated with radioactive iodine become hypothyroid and are then placed on maintenance treatment. In these patients thyroid function tests are used regularly in order to optimise replacement thyroid hormone therapy. The regular requests for thyroid function tests could have an effect on the accuracy of the data collected.

5.3 RECOMMENDATIONS

1. The ordering clinician should include evidence in the patient's clinical record that an evaluation of history and physical findings preceded the ordering of thyroid function tests.
2. The fact that some combination tests are still requested indicate a need for these tests as a result of clinical findings other than the diagnosis of primary disease. The data is therefore not limited exclusively to thyroid function tests indicated in the initial investigation of thyroid function only and may reflect tests conducted for the diagnosis of other thyroid disease as well as the management of patients previously diagnosed with thyroid disease.

3. Implementation of a pre-authorization system by the private medical schemes requiring the clinician to motivate for the tests before approving them.
However, this may prove to be a time consuming and cumbersome process.
4. The evidence-based guidelines published in the South African Medical Journal may not have reached all clinicians. The guidelines could still be mailed once again to all clinicians registered with the Health Professions Council of South Africa in order to educate as many clinicians as possible.
5. Continued education for clinicians on thyroid disease with appropriate testing of thyroid function.

5.4 RECOMMENDATIONS FOR FURTHER RESEARCH

1. Evaluation of the use of appropriate tests in order to confirm a suspected clinical diagnosis before and after the publication of evidence-based guidelines.
2. Evaluation of the use of appropriate tests in order to monitor patients being treated for thyroid disease.
3. Evaluation of the use of appropriate tests by clinicians within the public and private sector. This eliminates the use of a database, which may restrict the researcher with regard to the analysis of the data.