DEPARTMENT OF INTERNAL MEDICINE

SECTION OF ENDOCRINOLOGY

PATIENT EDUCATION

THYROID CANCER

INTRODUCTION: The thyroid is a small butterfly-shaped gland located in the middle of the neck below the voice box and above the collarbones. The thyroid gland produces thyroid hormones (T3, T4) that regulate how the body uses and stores energy (the body’s metabolism). Thyroid cancer occurs in both men and women but is three times more common among women. Thyroid cancer usually appears as a painless lump in this area. The results of thyroid function (blood tests) are usually normal. There are four main types of thyroid cancer (papillary, follicular, medullary, and anaplastic). Papillary and follicular cancers are the most common types and have a five-year survival rate of over 95% if properly treated.

CAUSES: The specific reason for developing thyroid cancer is still unknown in the vast majority of patients but several known risk factors have been identified:

* External radiation to the head or neck, especially during childhood
* Family history of thyroid cancer, particularly the medullary type of thyroid cancer
* Gender (a lump in a man’s neck is more likely to be malignant than one in a woman’s neck)

DIAGNOSIS: After a detailed history and careful physical examination, your physician will recommend testing which includes, but are not limited to, the following:

* Blood tests – FT3, FT4, TSH
* Ultrasonography – to determine number of nodules, presence of enlarged lymph nodes, or guidance of the fine needle biopsy if the nodule is difficult to feel
* Fine needle aspiration biopsy – a bedside procedure to know whether a nodule is benign or malignant

TREATMENT: Most types of thyroid cancer can be diagnosed early and cured completely.

* Thyroidectomy – by an experienced thyroid surgeon, which may include removal of any abnormal lymph glands
* Radioactive Iodine Treatment (Thyroid Remnant Ablation) – usually recommended in order to destroy any remaining thyroid tissue, normal and malignant; radioiodine treatment is in the form of capsule or liquid administered four to six weeks after surgery
* After thyroid remnant ablation, Levothyroxine (thyroid hormone) is started and the dose adjusted

FOLLOW-UP AND MONITORING: Your doctor will determine the optimal frequency of further monitoring studies to be certain that the cancer does not recur.

* TSH – to aid in the adjustment of Levothyroxine dose
* Thyroglobulin – to determine whether there is recurrence of thyroid cancer
* Whole Body Scans (Radioiodine) - to check for recurrence or spread (metastases) of thyroid cancer
* Ultrasonography of the neck and thyroid bed – to check for recurrence of thyroid cancer in the neck and lymph nodes

Most types of thyroid cancer are associated with a very good prognosis when diagnosed early and treated by a physician who is familiar with the management of this disease.