

INTRODUCTION

A solitary thyroid nodule occurs commonly (4-7% of adults) and is usually a benign lesion such nodule may be associated with a multinodular goiter or with an otherwise normal thyroid. Nodules in the very young and very old especially men are more likely to be malignant also exposure to ionizing radiation increases the incidence of both benign and malignant thyroid nodule and is a well recognized risk factor for the development of thyroid carcinoma. This procedure is safe, inexpensive, and easy to perform, and it allows better selection of patients for operation than does any other technique. Ultrasound can differentiate between benign and malignant nodules but is a sensitive method for determining whether a lesion is solid or cystic however it is useful in the follow up period to identify any further nodular growth. Radionuclide thyroid scans detect areas of active or decreased thyroid hormone synthesis but do not provide information that allows clear separation of benign and malignant nodules (**John et al., 1999**).

Solitary thyroid nodules are commonly seen in surgical outpatient clinics. A detailed history and a careful physical examination are essential. In the management of the solitary thyroid nodule. Fine needle aspiration cytology has become the corner stone investigation (**Meab and Qureshi, 1998**).

U.S. guided interstitial laser photocoagulation could become useful non surgical alternative in the treatment of the the benign solitary solid cold thyroid nodule in patients who cannot or will not undergo surgery (**Dossing et al., 2002**).

Percutaneous ethanol injection under sonographic guidance is a relatively safe, low cost, out patient method of treatment that has been applied successfully as an alternative to surgery for the management of benign and malignant lesions of various tissues and organs. Among endocrine diseases, thyroid nodules; both cystic and solid, have been treated effectively using this technique (**Pomorski and Bastos 2002**).

Finally, conventional thyroidectomy leaves an undesirable scar on the anterior neck and for this reason, endoscopic thyroidectomy is a technically feasible and safe procedure that leads to an improved cosmetic result and a quicker recovery (**Gagner and Inabnet, 2001**).