# Primary hyperparathyroidism due to solitary adenoma

A comparative study of early and long term results of different surgical regimens.

### **Essay**

submitted for partial fullfilment of the M.S degree in general surgery

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TO
MY PARENTS,
MY WIFE,
AND
MY DAUGHTER REEM

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(I) Introduction and aim of work

primary hyperparathyroidism is now known to be the most common cause of hypercalcemia in unselected, non hospitalized persons. It is unusual in childern, more common in women than men, and most common in menopausal women. It occurs in about 1 in every 1000 individuals and in as frequent as 1 in every 500 women over the age of 45 years (Clark 1985)

About 85% of patients with primary hyperparathyriodism have a solitary parathyroid adenoma, 10% have diffuse hyperplasia, 4% have more than one adenoma and 1% have parathyroid cancer.

Once the diagnosis of primary hyperparathyroidism has been made, one must determine the best means of treatment. Medical treatment is somewhat effective for patients with minimal hypercalcemia, but dose not treat the underlying cause, that is, the hypersecreting gland or glands. Radiation therapy is generally ineffective. Surgery is very effective and more than 95% of patients with primary hyperparathyroidism will be cured by parathyroidectomy (Najarian and Delaney 1986).

The decision of surgery is based on an estimate of the likelihood of future complications, the likelihood of cure with surgery, and of course the wishes of the patient (Rossi and Cady 1991).

There are several surgical operations which include unilateral exploration and unilateral parathyroidectomy (removal of the adenoma and also the normal gland), bilateral exploration and unilateral parathyoidectomy (removal of the adenoma and also the normal gland), bilateral exploration with removal of the enlarged gland and incisional biopsy of 1-2 normal glands, and bilateral exploration with removal of the enlarged gland and incisional biopsy of the three normal sized glands and bilateral exploration with removal of the enlarged gland but with no biopsy (Tibblin, S. et al 1991).