The aim of presentation of this abstract is to discuss the possibility of multicentric participation and finding predictive bio markers, for deciding the addition of adjuvant radiotherapy, in differentiated thyroid cancers.

Introduction

• Locally advanced thyroid cancers have high rates of loco-regional recurrences after conventional treatment with surgery and radioactive iodine therapy
• Few retrospective studies showing the addition of radiotherapy (RT) and radiiodine treatment after surgery in locally advanced thyroid cancers (LATC)
• No clear indications or protocols for radiotherapy in differentiated thyroid cancer

Aim

• To assess the impact of adjuvant RT on loco-regional control in patients with locally advanced thyroid cancers who have undergone surgery with radioiodine therapy
• To assess toxicity (early and late at 2 years) of adjuvant RT in these patients

Design

Phase II randomized study

Sample Size

Calculated considering a 23% decrease in loco-regional recurrence with addition of adjuvant RT The total sample size is 72

Inclusion criteria

Patients undergoing total/completion thyroidectomy for thyroid cancer (papillary/follicular/poorly differentiated) and having at least two of the following features intra-operatively and/or on histopathology
• Gross extrathyroidal extension into soft tissues of the neck, trachea, esophagus, recurrent laryngeal nerve
• R1/ shave resections (minimal residual disease
• R2 resections (gross residual disease)
• Multiple lymph nodes positive(>2) with perinodal extension at level VI

Exclusion criteria

• Anaplastic or medullary thyroid cancer
• Previous history of radiation
• Pregnancy
• < 18 years
• Patient unwilling to participate in the study

We have accrued 52/72 patients till date