

¿What is the outcome of Nonfunctioning Pituitary Adenomas (NFPAs) after surgery and are there any factors to predict it? : A Multicenter Study in Northern Spain.

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OBJECTIVES

There is scarcity of data on the recurrence and/or progression (R/P) rate in NFPAs after surgery and the risk factors that can predict this outcome. So the aim of this study was to analyze a large series of NFPAs with a long follow-up after surgery, focusing on the evaluation of R/P rate and the risk factors associated with it.

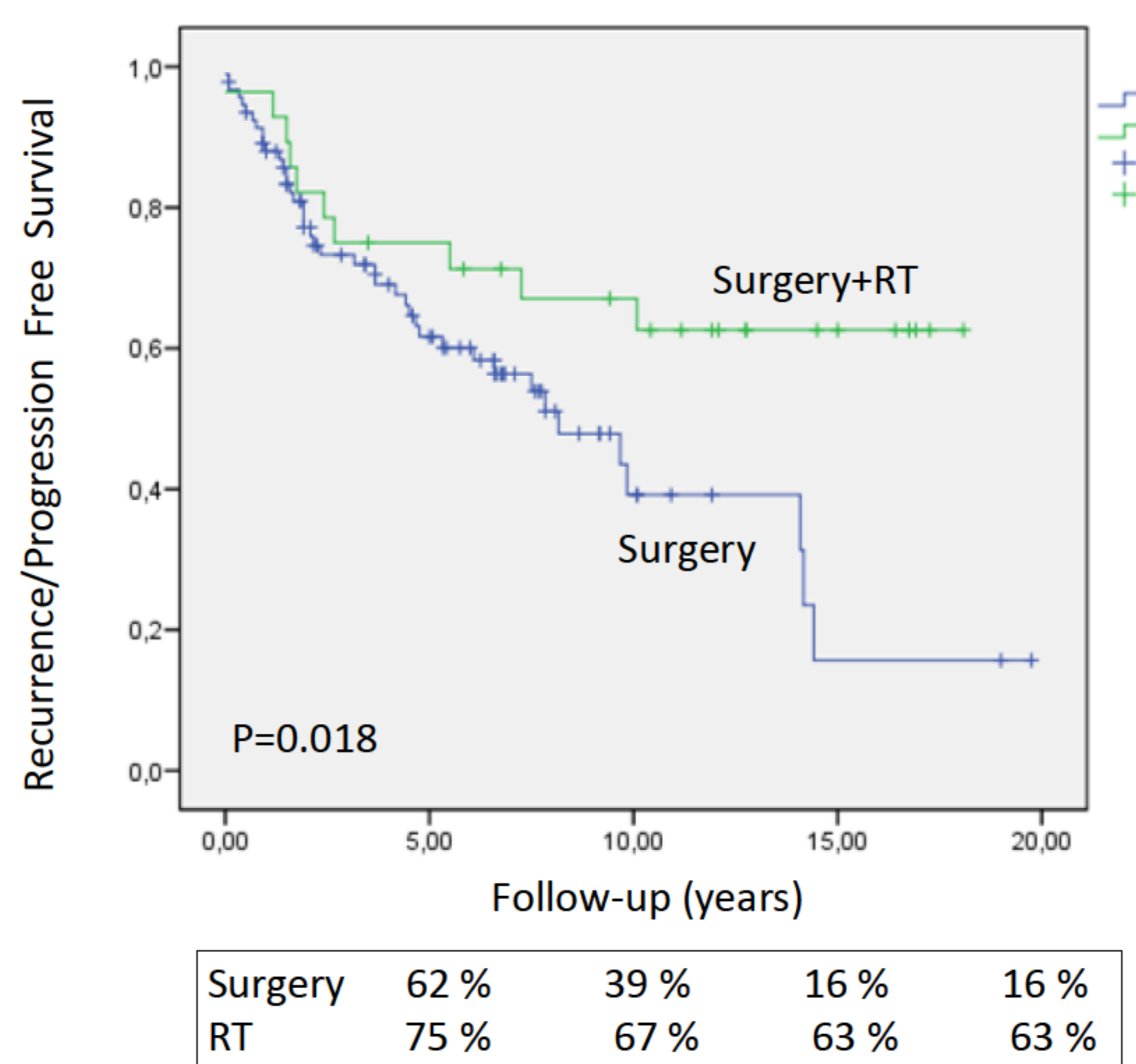
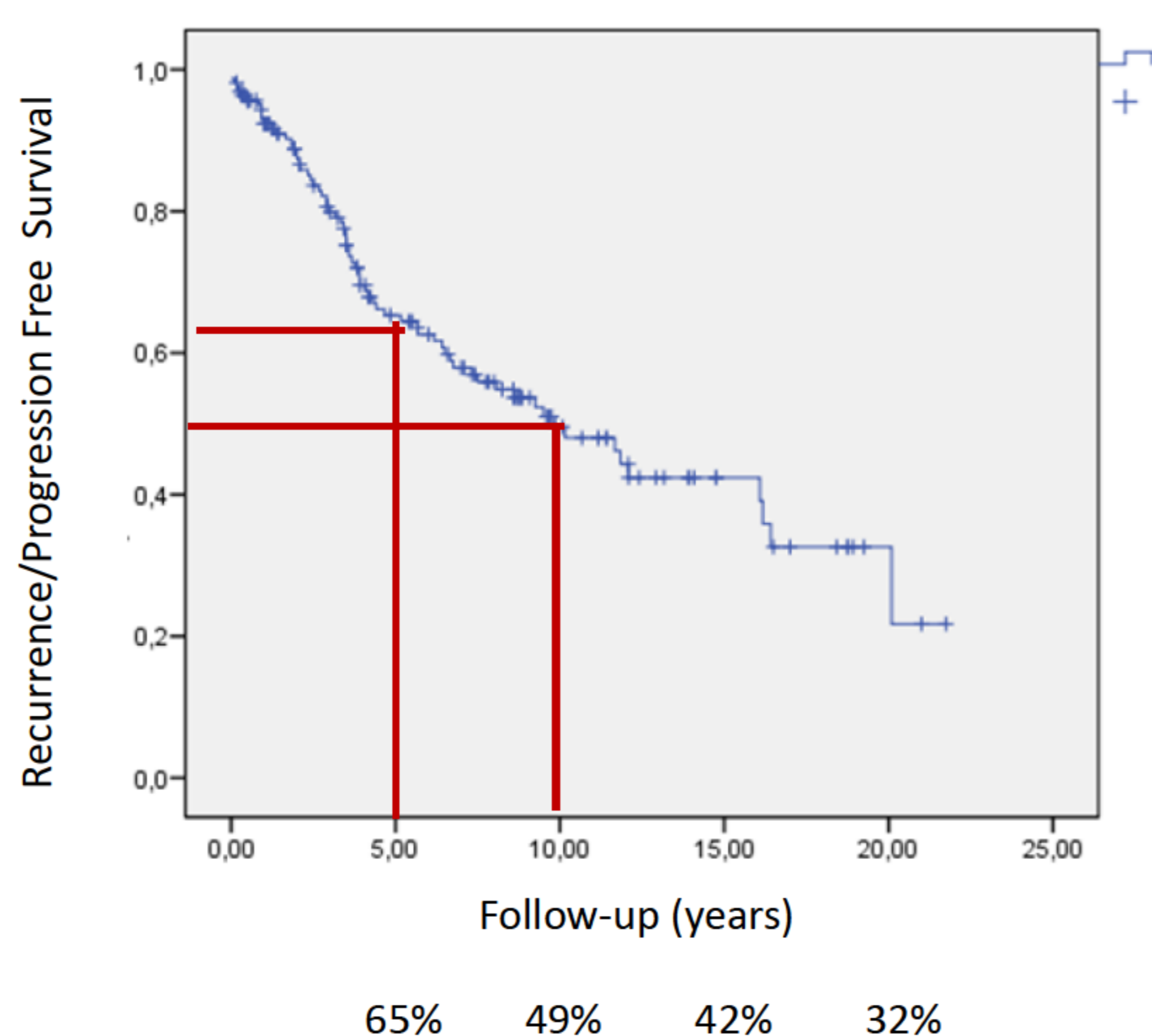
METHODS

Retrospective cohort analysis of 164 patients with NFPAs from 3 different centers in Northern Spain who underwent surgery between 1987-2014. The main outcomes were R/P rate during follow-up using Kaplan-Meier estimator and the univariate and multivariate analysis of risk factors that could be involved with R/P.

RESULTS

R/P was detected in 70 patients (43%) after surgery, over a median clinical follow-up of 8 years (1-27), the median time to R/P was 4.1 years. Recurrence-free survival was 65%, 49%, 42% and 32% at 5, 10, 15 and 20 years after surgery, respectively. The univariate analysis identified the following R/P risk factors: pituitary apoplexy and visual impairment at diagnosis; and as protective factor: RT after surgery in patients with subtotal resection (STR) but the multivariate Cox analysis only confirmed as independent factors: visual impairment (hazard ratio [HR] 2.1, 95% confidence interval [CI] 1.1-4.2; p=0,02) and RT in patients with STR after surgery (HR 0.4, 95% CI 0.21-0.89; p=0.02).

Kaplan- Meier estimates of Recurrence and /or Progression (R/P)



CONCLUSIONS

Long term follow-up in NFPAs after surgery is mandatory because R/P occurs in a large percentage of these patients and the risk does not disappear in the long term. Our study suggests that this follow-up has to be more rigorous in patients with visual impairment at diagnosis because they have the highest risk of R/P. RT could decrease this risk specially in those patients with subtotal tumor resection.