

positive cells were seen throughout most areas of the tumor.

Results

The papillary carcinoma group consist of 19 females and 1 male with an age range 25-55 years, Grave's group comprise 8 females and two males with an age range 18-60 years (Table 1).

Table 1. Age distribution of patients with papillary carcinoma and Grave's disease.

Age (years)	Papillary carcinoma		Graves	
	No.	%	No.	%
<50	12	60	8	80
≥50	6	40	2	20

Sixteen out of twenty cases (80%) of papillary carcinomas showed diffuse and intense cytoplasmic staining with CK19 (Fig.1 and 2), four cases (20%) showing diffuse faint staining. Seven of the 10 Grave's cases (70%) are completely negative (Fig.3 and 4). The remaining 3 cases (30%) showing focal weak staining with CK19.

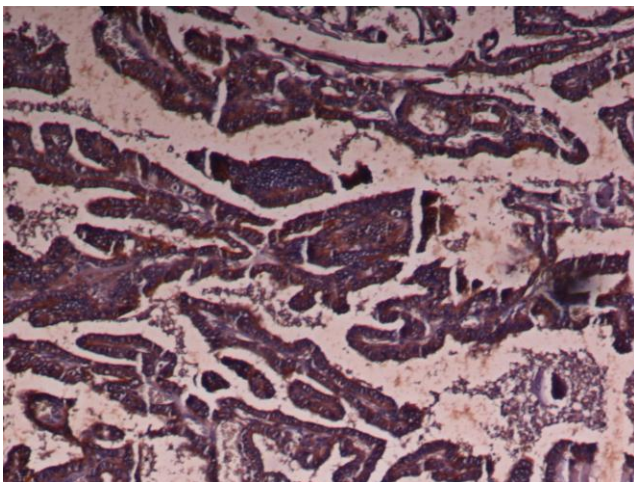


Fig. 1. Diffuse, strong CK19 staining in papillary carcinoma (CK19X100)

There was a significant difference in the extent of staining between papillary thyroid carcinoma and Grave's disease ($P = 0.005$) by using Chi

square test and there was highly significant difference in intensity of staining between them ($P = 0.0001$) (Table 2 and 3).

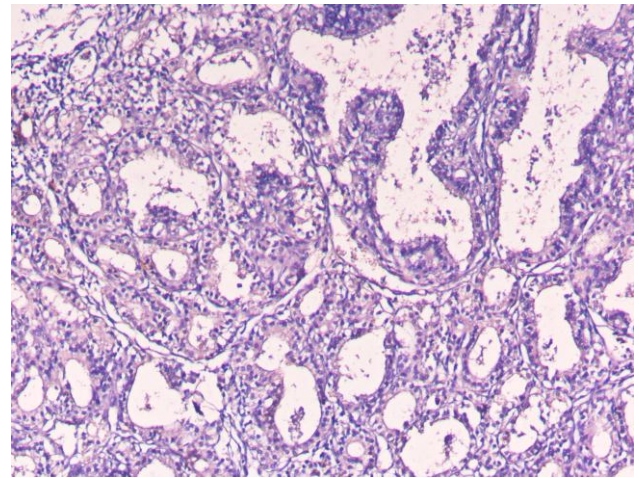


Fig. 2. Diffuse, strong CK19 staining in papillary carcinoma with strong desmoplasia, CK19X100

Discussion

One of the most frequent problems in thyroid pathology is differentiating papillary carcinoma like changes in Grave's disease which may contain vesicular nuclei, nuclear grooves from true papillary carcinoma which may be difficult depending on microscopical features only so there is a need for other methods like immunohistochemistry to solve this problem using different markers like (HMB-1, galectin-3 and CK19).

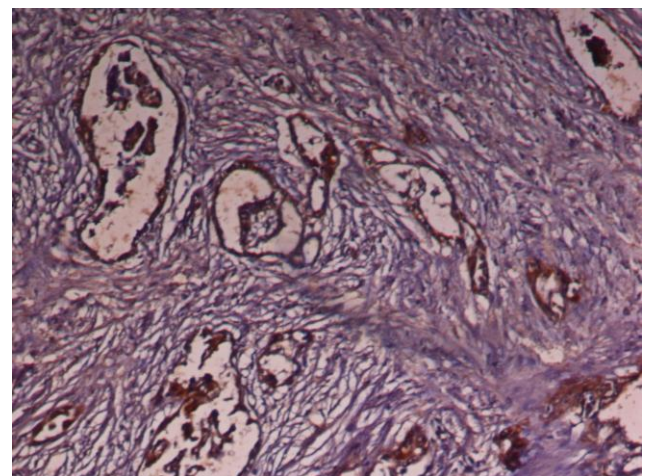


Fig. 3. Faint or absent staining with CK19 in Grave's disease (CK19X100)