

Abstract no.: PR. 1-9

## Pediatric Testicular Tumors:

### A 16-year Single-Centre Experience and Contemporary Review

#### Diagnostic Approach

8 Chinese boys were identified among clinical records from 2004 to 2020.

6 patients presented with parent-discovered painless scrotal masses; 2 were diagnosed incidentally.

Overall mean age of diagnosis was 13.7 months (one outlier was diagnosed at 12 years old).

All patients underwent scrotal ultrasound, yielding a variety of sonographic appearances; Hydrocele was found in 2 patients.

Tumor markers AFP,  $\beta$ -hCG & LDH were obtained; AFP was elevated in three patients (26,765 IU/mL, 3,531 IU/mL and 1,816 IU/mL); Other cases had completely normal tumor markers.

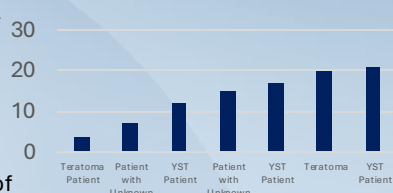
Five boys underwent radical inguinal orchiectomy; One child with bilateral tumors had successful bilateral testis-sparing enucleation.



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Age of Diagnosis of PTT Patients (months)



#### Results

Pathology report three low-stage yolk sac tumors (two T1N0M0 and one T2N0M0) and three mature teratomas, one of which had bilateral involvement.

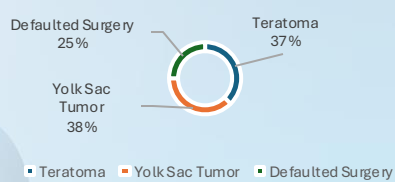
USG appearance varied among patients with the same tumor subtype.

All cases with elevated AFP were diagnosed with yolk sac tumor while all cases with normal tumor markers were diagnosed with mature teratoma.

Mean age of diagnosis were 16.7 & 12 months for YST & teratoma respectively.

With mean follow-up of 7.5 years, all patients remained disease-free without adjuvant therapy; tumor markers normalized within 2 months post-operatively. The bilateral teratoma patient reached Tanner stage 4 by age 14 with symmetrical testes. One late-onset varicocele was noted.

Proportion of Types of PTTs



	YST 1	YST 2	YST 3	TRT 1	TRT 2	TRT 3
USG Appearance	Heterogenous mass with increased vascularity & cystic spaces	Isogenic nodule with increased vascularity	Homogenous mass with increased vascularity	Heterogenous mass with calcified foci	L: Heterogenous mass with cystic & solid components and calcified foci R: isogenic mass with cystic component	Cystic lesions with solid component
Hydrocele	+	-	-	-	+	-
AFP	+	+	+	-	-	-
B-hCG	-	-	-	-	-	-
LDH	-	-	-	-	-	-
Staging	T2	T1	T1	N/A	N/A	N/A