



# EARLY PUBERTY; DIAGNOSIS, TREATMENT AND PROGNOSIS\*

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## INTRODUCTION

The aim of this study was to evaluate the diagnosis at the first examination and last visit, etiology, prognosis, clinical properties of girls referred to the pediatric outpatient clinic with a presumptive diagnosis of early puberty for ten years and defining the effect of treatment on final height (Fht).

## RESULTS

In this single-center study, we included 1330 patients who were diagnosed during the years 2004-2014. History, anthropometric data, bone age (BA), hormones and pelvic ultrasonography were analyzed. Bone age was determined by left hand X-ray and predicted adult height was calculated.

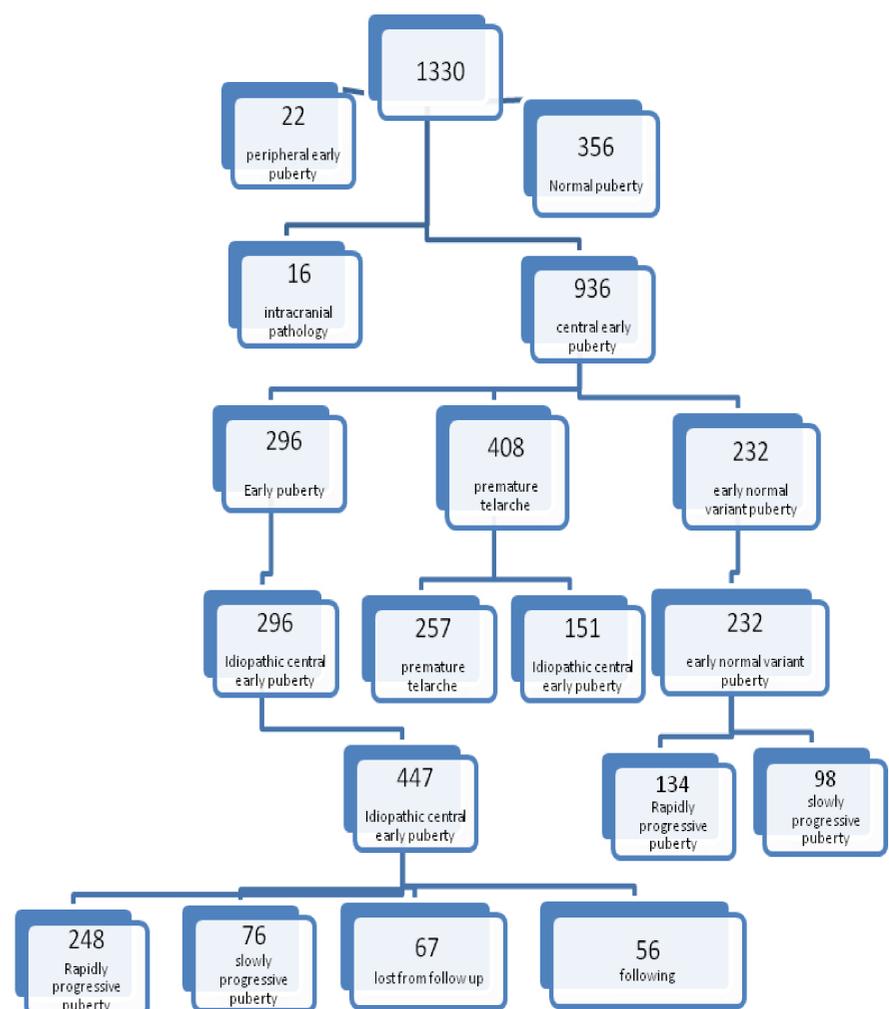
Of the 1330 girls referred for early onset breast development 336 (25,2%) had false alarms for puberty, 22 (1,6%) had peripheral early puberty (PEP), 16 (1,2%) had central early puberty (CEP) with an organic origin. The prediagnosis of the remaining 936 girls were, early puberty (EP) (31,6%), premature thelarche (PT) (43,6%) and early onset puberty (EOP) (24,7%). All of the girls prediagnosed with EP were determined idiopathic central early puberty (ICEP) for definitive diagnose. %37 of the girls prediagnosed with PT were determined ICEP for definitive diagnose and the remaining %63 weren't progressed rapidly. All of the 232 girls prediagnosed with EOP were determined EOP for the final diagnose.

According to the first pubertal signs; Fht and Fht SDS of <7 yr (p =0,022, p =0,041) and 7-8 yr (p =0,001, p

=0,001) girls was significantly higher in treated groups than untreated groups, however, there was no statistically significant difference between treated and untreated group in >8 yr girls. The age of menarche was significantly higher in treated girls than untreated girls.

## CONCLUSION

if pubertal signs developed before 8 years, GnRHa treatment is effective in preserving height and delaying menarche in girls. When treatment is started after 10 years of chronological age in rapidly progressive puberty, there is no significant change in final height.



\*There is no conflict of interest