[P2-517] Prospective Clinical and Laboratorial Evaluation in 851 Children Referred for Short Stature at a Pediatric Endocrinology Clinic.

Mauro A Czepielewski, Leila CP de Paula, Vanessa L Zen, Vanessa Tavarone, Betina F Pereira, Daniela Fedrizzi, Saskia de Boer, Smile Becker, Endocrinologia, Univ Fed do Rio Grande do Sul-Hosp de Clins de Porto Alegre, Porto Alegre, RS, Brazil

Growth is a sensitive indicator of a child's health, nutritional state and genetic background. Poor growth can be the first and only sign of various chronic diseases. Any growth failure should be investigated to differentiate normal variants in healthy children from a disease that requires treatment. The aim of this study was to demonstrate the importance of basal clinical and auxological examination, evaluate sex differences and quantify the prevalence of final diagnosis in 851 children prospectively evaluated for short stature in the Out Patient Pediatric Endocrinology Clinic at Hospital de Clinicas de Porto Alegre, Brazil. A complete anamnesis and physical exam were performed. After written parental consent, an evaluation was conducted, including various laboratory exams and bone age. Short stature girls without a clear diagnosis were submitted to karyotyping.

Referrals to our Center included 511 boys and 340 girls ($p<0,05$). Most of the boys were younger than girls, when the child's family first observed poor growth. More boys than girls ((57% vs 38,1%, $p<0,05$) were of normal height or short but healthy. Conversely, the percentage of girls (56,2% vs 46,3%, $p<0,05$) with any organic or genetic disease significantly exceeded that of boys. Seventy percent of patients were Tanner stage I at the first clinic visit and pubertal delay was more common in boys (25,7% x 17,1%), 71% of children had a target hight below 10 percentile. Anemia (25%), eosinofilia (36,4%) and verminoses (20,1%) were prevalent. Although the high prevalence of borderline exams (ex: high erythrocyte sedimentation rate-17%, low bicarbonate-8%, high TSH-10,6% and altered urinalysis-14,1%), we diagnosed only few cases of celiac disease (n=4), renal tubular acidosis (n=3), hipothyroidism (n=16) and renal faillure (n=5). Growth hormone deficiency was diagnosed in 51 children, Turner Syndrome in 41 girls and 73 children had other genetic diseases. Informed parent's stature was 2 cm higher than measured parent's stature ($p<0,001$).

Even with patients referred by pediatricians, we found a very high incidence of common clinical problems (ex anemia). This study remember the importance of an adequate basal evaluation before any endocrinological exam. Our data also suggest a sex bias in referrals for short stature, probably because social pressures focus more in growth in boys than girls. Finally, to calculate target height we should allways consider measured parent's height instead of informed height.