



POSTER PRESENTATION

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A clinical study of relationship between obesity and pubertal development in girls

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Purpose

Recently, public interests for obesity and earlier pubertal development has been increasing. The purpose of this study was to analyze the relationship between obesity and pubertal development in girls.

Methods

This study was performed for 158 girls with earlier pubertal development from July 2008 to June 2010. Their mean age was 8.27 ± 1.3 years and mean bone age advancement was 1.86 ± 0.3 years.

Results

1. Upon the weight-for-height percentiles, their obesity rate was 9.2% and overweight rate 15.8%. However, upon BMI the result was a little different, that is, their obesity rate is 13.2% and overweight rate is 24.3%. 2. About 40% of the girls had a family history of early maturation. Among them, 25.7% had a maternal history, 4.6% paternal and 7.2% both. However, 60% of them had no family history. 3. We then classified these girls into the families with one daughter and one son and those with two daughters. In one-daughter/one-son families, 65.3% were the first children and 30.8% were seconds. In two-daughters families, 65.3% were the firsts and 34.7% were seconds. 4. We found that 67.5% had a history of taking herbal medicine materials.

Conclusions

The obesity and overweight rate in girls with earlier pubertal development was higher than the age-matched normal females, but with a little discrepancy between weight-for-height percentile and BMI-based data. And, it seems to be possible that herbal medicine materials is

a potential factor for earlier pubertal development in Korea.

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