# SERUM LEPTIN LEVEL IN CHILDREN WITH ATOPIC DERMATITIS TREATED TOPICAL STEROIDS

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## Background:

Leptin, the obese gene product, is a 16-kDa-peptide hormone secreted by adiposities. Systemic administration of exogenous glucocorticoids has been found to increase circulating leptin levels. In this study, we aimed to assess serum leptin in children with atopic dermatitis treated with local steroids.

#### Methods:

Twenty children with atopic dermatitis were included during the 2001-2002-time period. The study was conducted prospectively. Atopy was defined as the presence of at least one aeroallergen-specific IgE antibody. Serum leptin was determined using a commercially available radioimmunoassay kit (human Leptin RIA kit: Linco Research Inc., St Louis, MO, USA) with 3.4-8.3 % intra-assay and 3.0-6.2% interassay coefficients of variation, and 0.5ng/ml sensitivity.

#### Results:

Fourteen boys and six girls with atopic dermatitis, the mean age of the patients was  $3.1\pm2.2$ . 43 % of the family histories for atopy were positive, 60 % of the cases passive smoking histories were positive. In seven patients the aeroallergen specific IgE were positive. All 20 patients treated clobetasone 17-butirate (0.05%). There was no significant difference in serum leptin between patients (mean  $4.6\pm3.8$  SD), and controls (mean  $6.2\pm3.6$  SD) (p>.05).

### Conclusion:

Local steroid does not influence circulating leptin levels, suggesting that regulation of body weight is unaffected.

Key Words: Atopic dermatitis, leptin, topical steroid