Comparison of antropometric and biochemical parameters in obese children with or without primary headache

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Introduction and objectives:
The objective of our study was to investigate the physical examination and laboratory findings in obese children with or without primary headaches.

Methods:
A total of 161 children, aged 8-18, with obesity (90 female and 71 male) and primary headache, admitted to pediatric endocrinology and pediatric neurology department between 2013 and 2018 were evaluated retrospectively. Participants were divided into subgroups as with tension headache and migraine headache. Obese children without primary headache were included in the control group. Laboratory and oxologic data were compared between the groups.

Results:
Twenty-nine obese children had migraine and 35 had tension type headache. There was no statistically significant difference between the groups with respect to gender, age, body mass index (BMI), BMI standard deviation score (BMI SDS), waist circumference and hip circumference. LDL-cholesterol (LDL-C) and total cholesterol (TC) levels were significantly higher in obese children with migraine headache compared to group without primary headache. There was no difference between the groups in terms of other biochemical parameters.

Conclusion:
There is a probable relationship between cholesterol elevation and migraine headache in obese children. For that reason, blood lipids should be followed carefully in obese children with migraine headache.

References: