Contents of adipokines in patients with type 2 diabetes mellitus

Sharafetdinov Kh.[1,2,3], Nazarova A.[1], Plotnikova O.[1], Pilipenko V.[1], Alexeeva R.[1], Sentsova T.[1]

[1]Federal Research Centre of Nutrition, Biotechnology and Food Safety,
[2]I.M. Sechenov First Moscow State Medical University,
[3]Russian Medical Academy of Postgraduate Education, Moscow, Russia

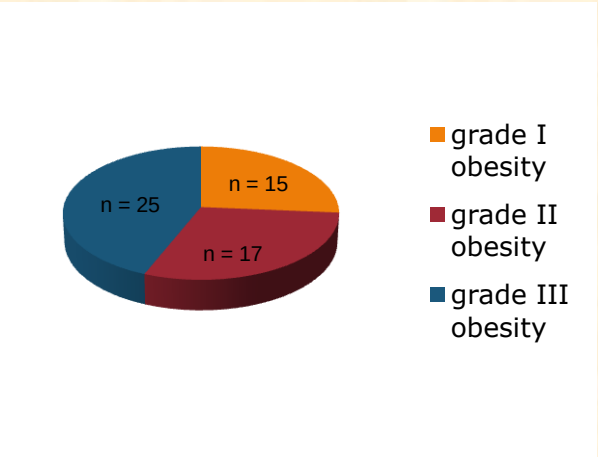
ABSTRACT

To determine content of adipokines in patients with type 2 diabetes mellitus (DM) and obesity.

METHODS

57 patients with type 2 DM were examined (mean age 57.6 ±1.1 years, mean duration of disease 7.9 ± 0.6 years. All patients received standard glucose-lowering therapy. They were divided into the following groups according to their degree of obesity: grade I obesity (n=15), grade II obesity (n=17), grade III obesity (n=25). All patients were determined contents of adiponectin, resistin and leptin levels in serum.

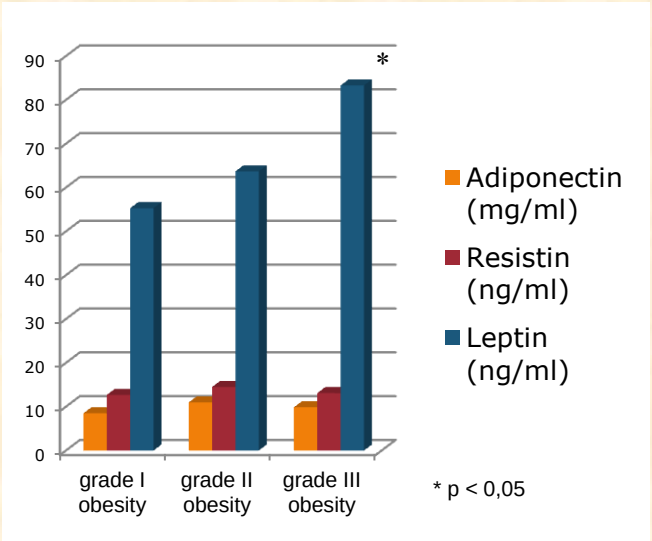
Figure 1. Distribution of obesity in patients with type 2 diabetes.



RESULTS

It is shown that the average level of adiponectin and leptin in obese patients with grade I obesity was 8.5±0.67 mg/ml and 55.3± 12.9 ng/ml, respectively; in patients with grade II obesity - 10.97±1.2 mg/ml and 63.7±12.3 ng/ml, respectively; in patients with grade III obesity - 9.86±0.6 mg/ml and 83.3±4.21 ng / ml, respectively. Averaged level of resistin in patients with grade I, II and III was above the normal range (12.7±2.1ng/ml, 14.5±3.0 ng/ml and 13.1±0.85 ng/ml, respectively).

Figure 2. The average level of adipokines in obese patients with type 2 diabetes.



CONCLUSIONS

Studies in patients with type 2 DM with different grade of obesity showed a decrease in serum adiponectin levels, elevated content of leptin and resistin.

REFERENCES

Dep. of metabolic diseases, Federal Research Centre of Nutrition, Biotechnology and Food Safety.
115446, Kashirskoe shosse 21, Moscow, Russia.
Tel: +7 (499) 794-35-16; fax: +7 (499)794-35-16.
E-mail: sharafandr@mail.ru