



# CORRELATION BETWEEN SELECTED ANTHROPOMETRIC, BIOCHEMICAL PARAMETERS AND CRP-REACTIVE PROTEIN CONCENTRATION AMONG PATIENTS WITH ENDOCRINE DISORDERS

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## INTRODUCTION:

Anthropometric studies are one of the methods, by means of which it is possible to assess patient's nutritional status.

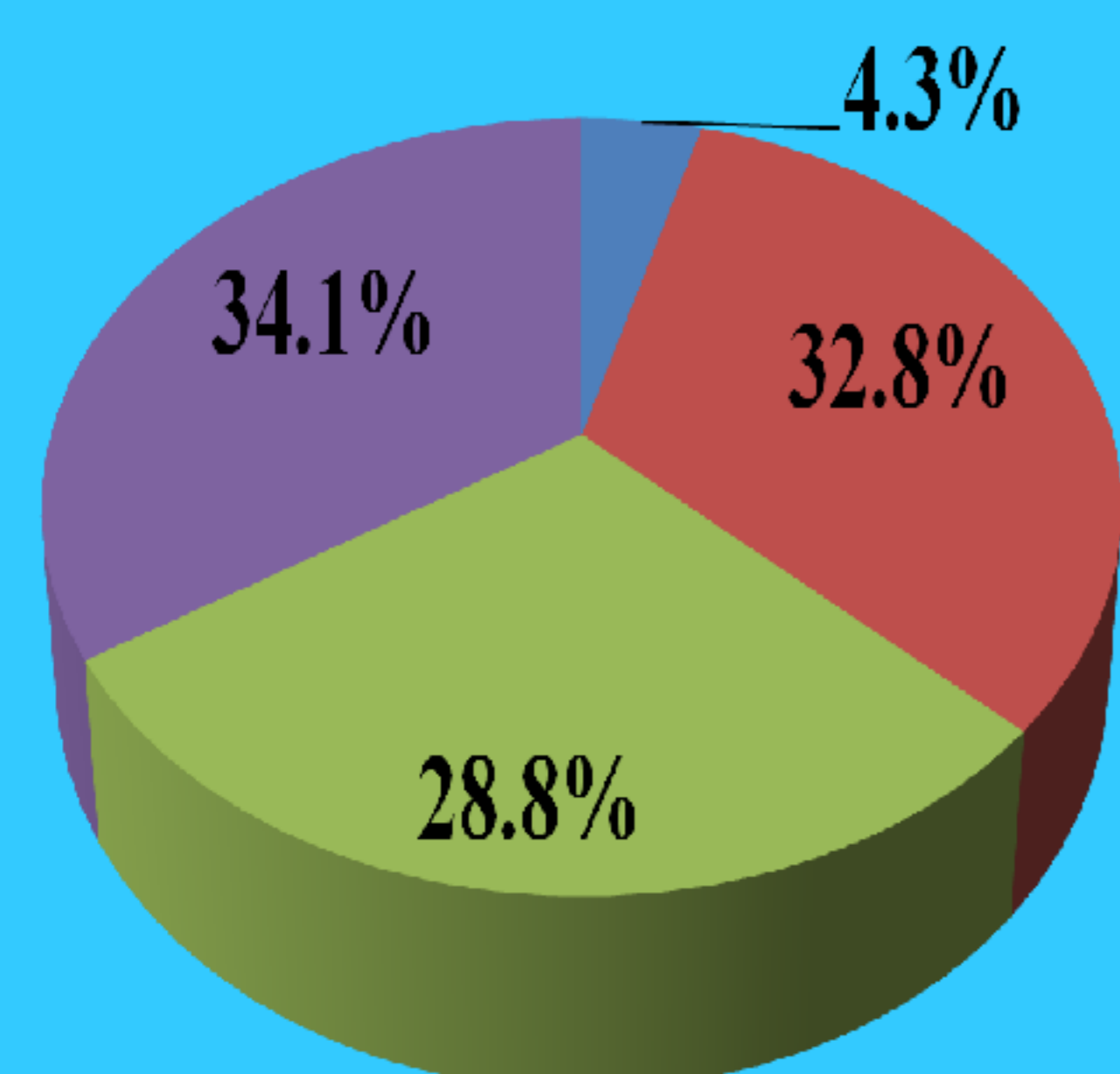
## AIM:

The aim of this study was to assess the relationship between the selected anthropometric as well as biochemical parameters and CRP- reactive protein concentration among patients with endocrine disorders.

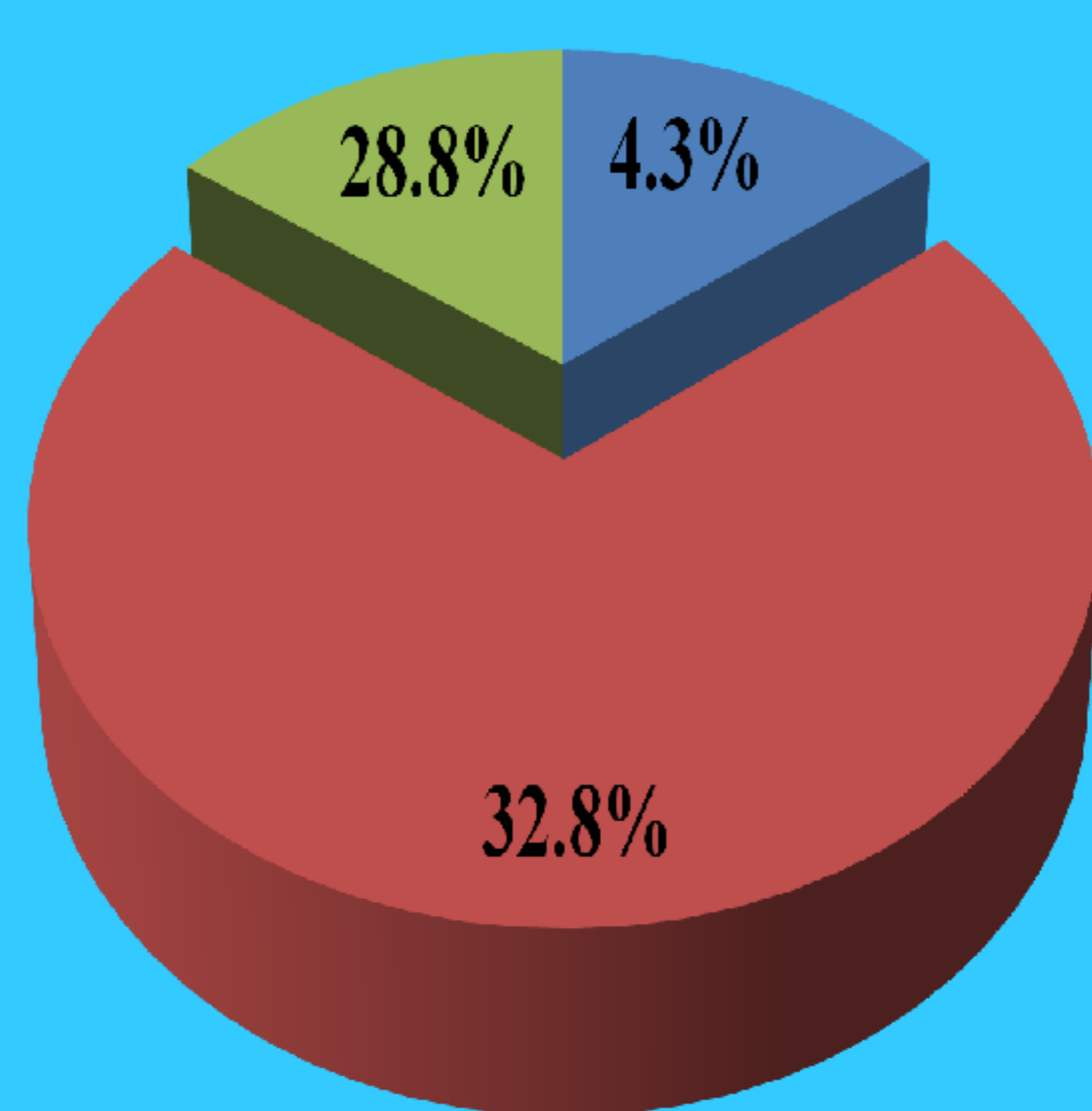
## MATERIALS AND METHODS:

The studied group involved all patients hospitalized at the Endocrinology Department in the Piekary Medical Centre in Piekary Slaskie from 2<sup>nd</sup> January 2012 to 31<sup>st</sup> December 2012 who met the inclusion criteria - 299 subjects (264 women and 35 men). Anthropometric studies and body composition analysis were carried out and results of biological parameters were analyzed. The following indices were measured: BMI, WHR, WHtR and biochemical tests as follows: 25(OH)D<sub>3</sub>, CRP and lipid profile. The study was retrospective and non-interventional.  $\alpha=0.05$ .

## RESULTS:



Concentration of 25(OH)D<sub>3</sub> among studied group



■ Serious deficiency ■ Deficiency ■ Adequate concentration

Concentration of :	Mean	SD
25(OH)D <sub>3</sub> [ng/ml]	20.3	8.3
CRP reactive protein [mg/l]	4.7	7.4
Total cholesterol [mg/dl]	212.1	45.4
HDL cholesterol [mg/dl]	61.5	19.3
LDL cholesterol [mg/dl]	124.9	42.4
Triglycerides [mg/dl]	135.4	76.3

### There were observed positive correlation between:

- BMI and CRP-reactive protein (R=0.33; p<0.0001);
- WHtR and CRP-reactive protein (R=0.38; p<0.0001);
- WHR and CRP-reactive protein (R=0.26; p<0.0001);

- percentage of body fat and CRP-reactive protein (R=0.26; p<0.001);
- waist circumference and CRP-reactive protein (R=0.26; p<0.0001).

## CONCLUSION:

Induction of inflammation was observed in all patients with abnormal body weight. Inflammation intensity (determined on the basis of CRP-concentration) was higher in overweight than obese patients.

