Background: Acne is a multifactorial disease of the pilosebaceous unit, characterized by non-inflammatory, inflammatory lesions and scars. Metabolic syndrome (MS) is a group of alterations increasing the risk of cardiovascular diseases. Resistance to insulin is a causative/aggravating factor for acne. Researchers consulted patients at Dermatology and Lipid Clinics. Those with MS were evaluated according to the presence of acne scars. Those with acne scars had clinical/laboratorial investigation to check MS.

Objectives: Determine prevalence of MS in adults with acne scars. Identify presence of scars due to acne in patients with MS.

Methods: Clinical analysis comprised anamnesis and physical examination. Laboratory tests: glucose and insulin, CBC, lipid profile, kidney/liver tests. Statistical analysis consisted of prevalence with Confidence Interval, in a 95% range of acne history/scars among patients. Chi-Square Pearson’s test or Fisher’s exact test were used to evaluate the association of sociodemographic data, clinical/lab exams with presence of MS or acne scars.

Results: Population: 143 participants (58 from Dermatology, 85 from Lipids Clinics). From the 58 patients with acne scars, 21 presented MS. Patients with MS were older than those without MS. Patients with acne scars and elevated alcohol consumption, hypertension, elevated waist measurement and BMI presented significant difference when compared to those with negative results. Levels of triglycerides, LDL and glucose were the most elevated.

From the 85 patients with MS, 52 confirmed past medical history of acne. 27 out of the 52 patients with acne history presented acne scars. There was no statistical difference among groups according to analyzed data, with exception to the triglyceride levels.

Discussion: In both groups, correlation between acne and metabolic syndrome could be suggested. The high presence of acne history or scars in patients with MS may indicate a possible correlation. Results claim attention to evaluation of clinical/laboratory investigation.
related to the risk of metabolic syndrome, specially in severe forms.