# DYSLIPIDEMIA: THE RISC FACTOR OF AORTIC STENOSIS

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## Introduction

Aortic stenosis (SA) is the most common valvular heart disease and the third cardiovascular disease after hypertension and coronary heart disease in Western countries. There is currently no definite medical treatment that can delay or stop the progression of the disease. Therefore, risk assessment is needed to develop new strategies to prevent and slow the progression of the disease.

## Keywords

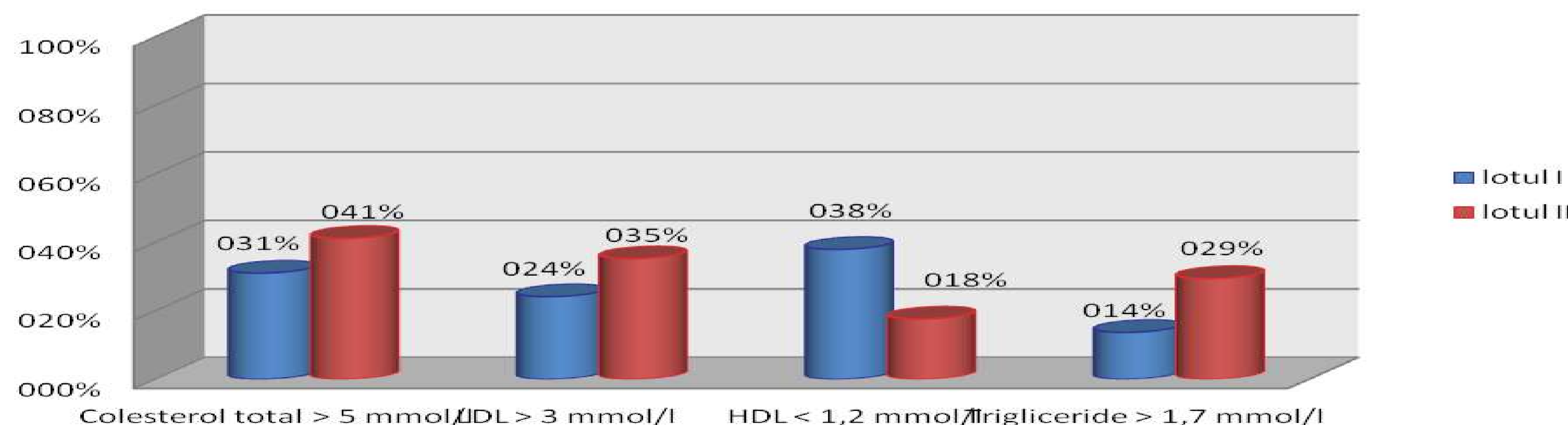Aortic stenosis, dyslipidemia, atherogenic index, non-HDL cholesterol

## Purpose

Evaluation of lipid profile and atherogenic index of plasma in patients with aortic stenosis to optimize treatment.

## Material and methods

We conducted a transversal, prospective study that included 46 patients with a diagnosis of aortic stenosis confirmed by echocardiography. Patients were examined according to a questionnaire, which included general data and lipid profile parameters. We calculated non-HDL cholesterol and the Atherogenic Index of Plasma (IAP).
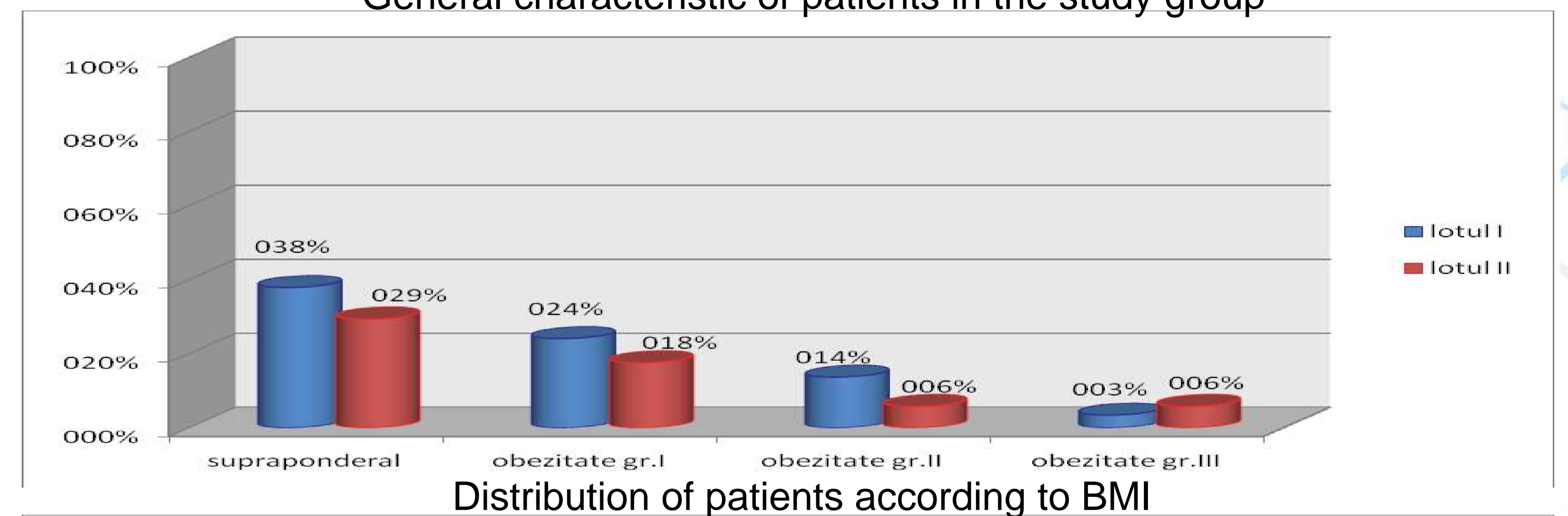
## Results

The mean age of the group was 64.3 ± 0.03 years. Evaluation of risk factors found hypertension in 28 (60.8%) cases, obesity - 33 (71.7%), dyslipidemia-18 (39.1%). Evaluation of the lipidogram showed a high level of total cholesterol in 18 (39.1%) cases, LDL-cholesterol - 13 (28.2%), triglycerides in 9 (19.5%) cases, and a low level of HDL was attested in 14 (30.4%) cases. Ideal values of non-HDL cholesterol (<3.4 mmol / l) were obtained in 17 (36.9%) patients. IAP indicated a moderate risk of developing atherosclerosis in 10 (21.7%) and an increased risk - in 6 (13.0%) cases.
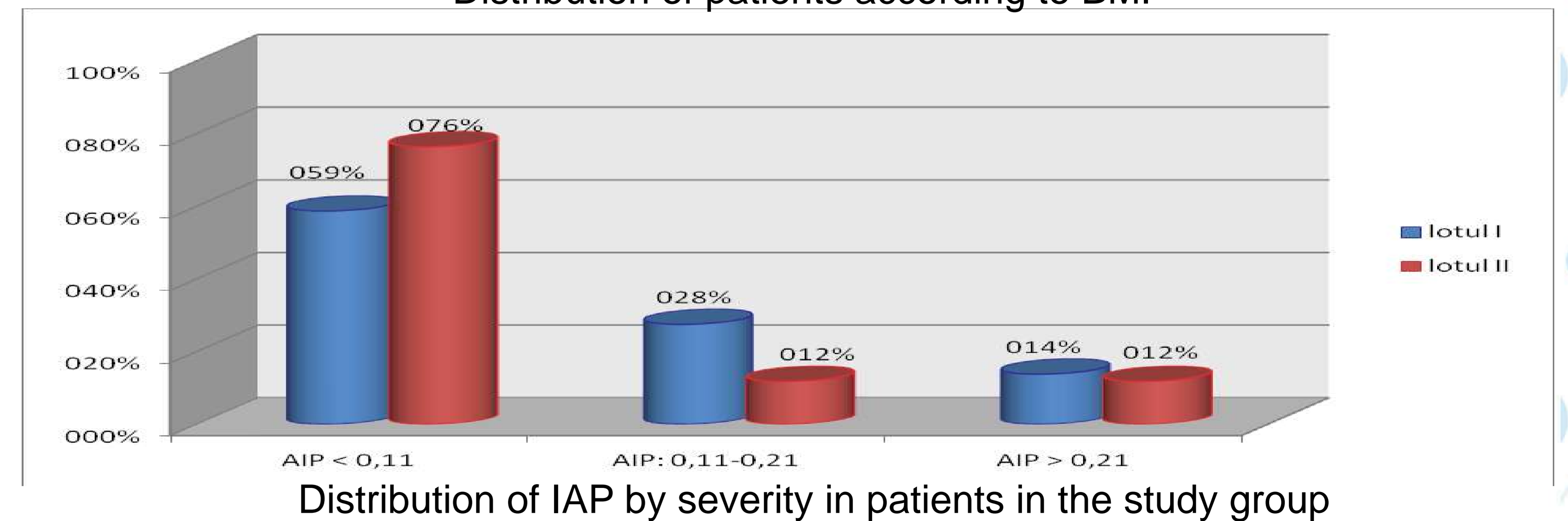
| Criterii | Lotul I, Stenoza aortică minimală și moderată N=29 | Lotul II, Stenoza aortică severă N=17 |
|---|---|---|
| Vîrsta medie | 60,3 ani | 68.3 ani |
| Sexul: - Feminin - Masculin | 17 (58,6%) 12 (41,4%) | 8 (47,1%) 9 (52,9%) |
| Domiciliu: - Urban - Rural | 7 (24,1%) 22 (75,9%) | 5 (29,4 %) 12 (70,6%) |
| Situaţia profesională: - Angajat - Şomer - Pensionar -Altele | 8 (27,6 %) 2 (6,9%) 15 (51,8%) 4 (13,7%) | 3 (17,6%) 1 (5,9%) 10 (58,9%) 3 (17,6%) |

General characteristic of patients in the study group



Distribution of patients according to BMI



Deviations in the lipidogram in patients in the study group



Distribution of IAP by severity in patients in the study group

## Conclusions

Dyslipidemia is common in patients with aortic stenosis, being attested in 39.1% of cases, and the atherogenic index of plasma with an increased risk of developing atherosclerosis in 34.7% of cases. Therefore the control of the lipid profile in aortic stenosis is essential in management of these patients.