

EFFECT OF AGE AND DIABETIC STATUS ON VASCULAR ACCESS (VA) FUNCTION IN PREVALENT HEMODIALYSIS (HD) PATIENTS

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INTRODUCTION AND AIMS

Some demographic and clinical settings of patients (pts) undergoing chronic HD can affect the VA function which should be monitored by measuring the blood flow (Q_A) rate (EBPG-2007).

The aim of this study is to analyze the effect of age and diabetic status on VA function in prevalent HD pts under VA surveillance for stenosis by Q_A measurements

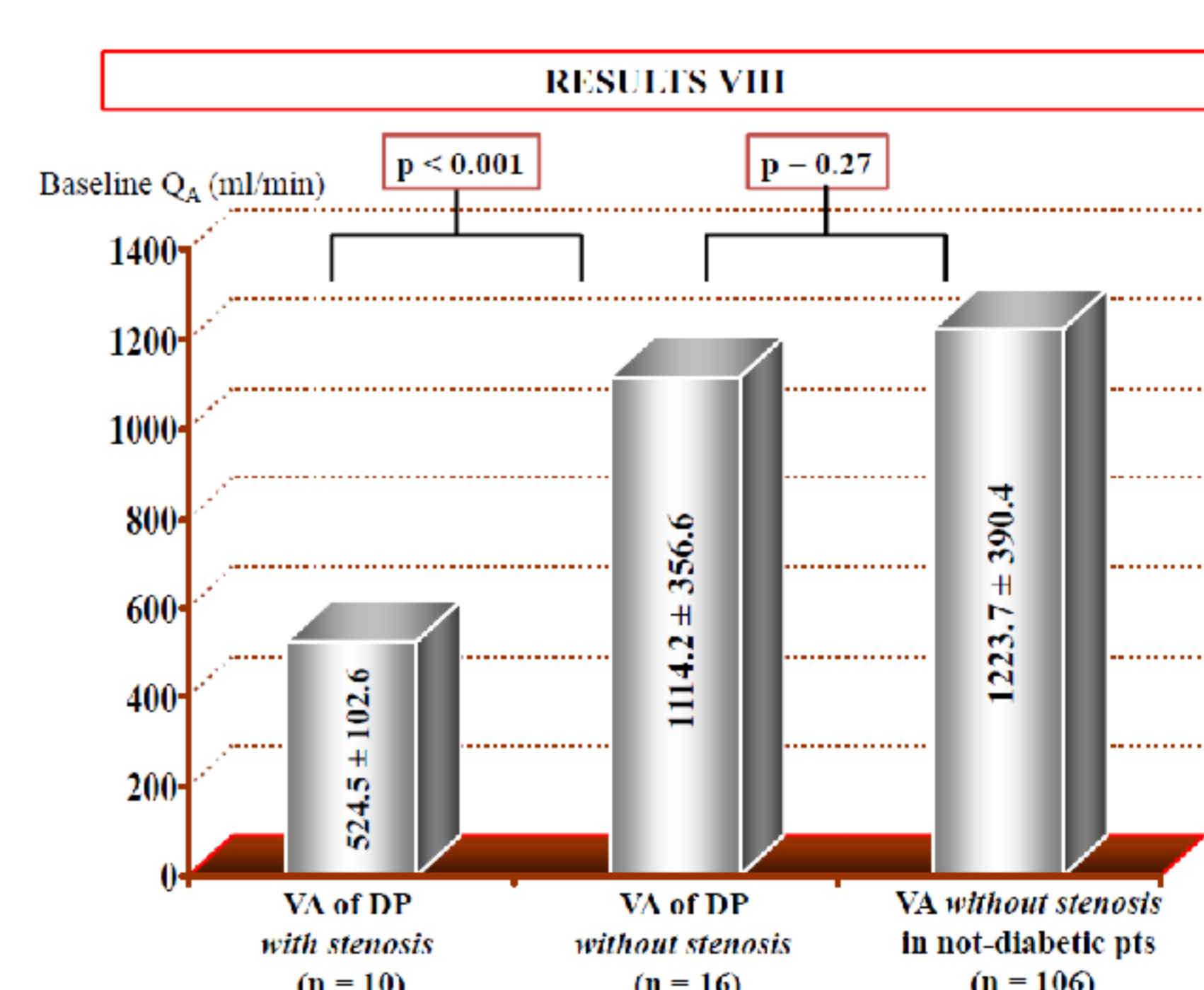
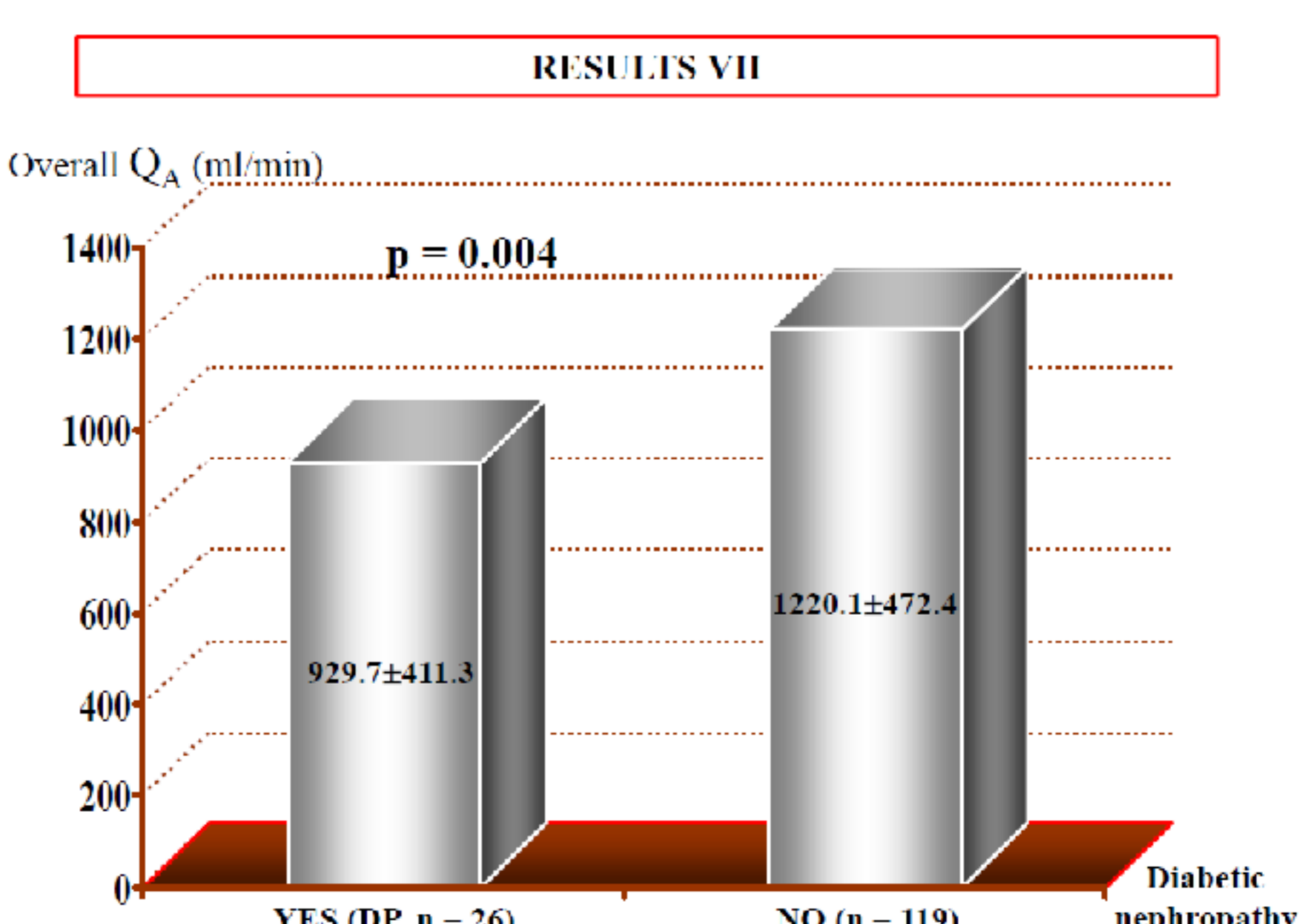
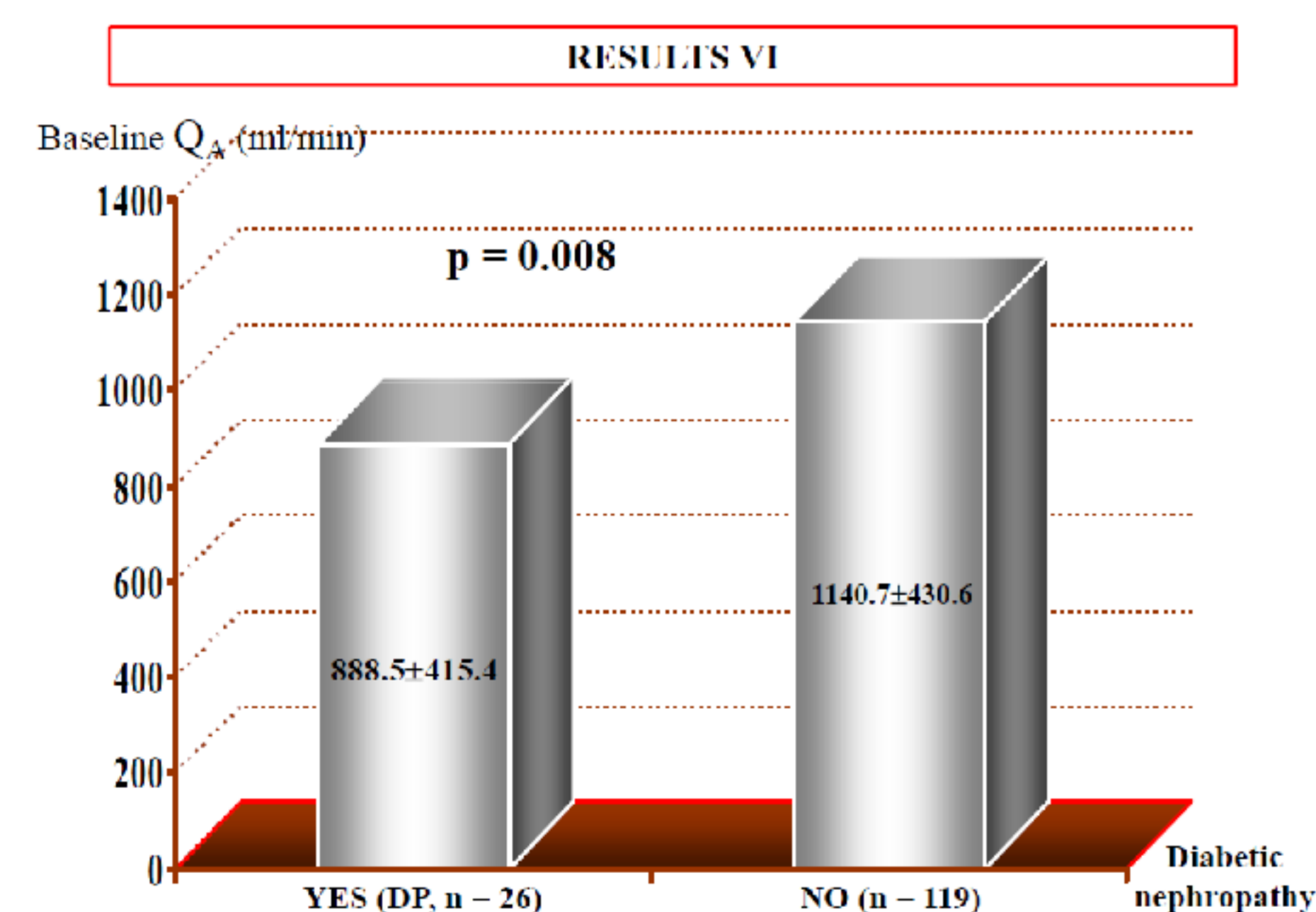
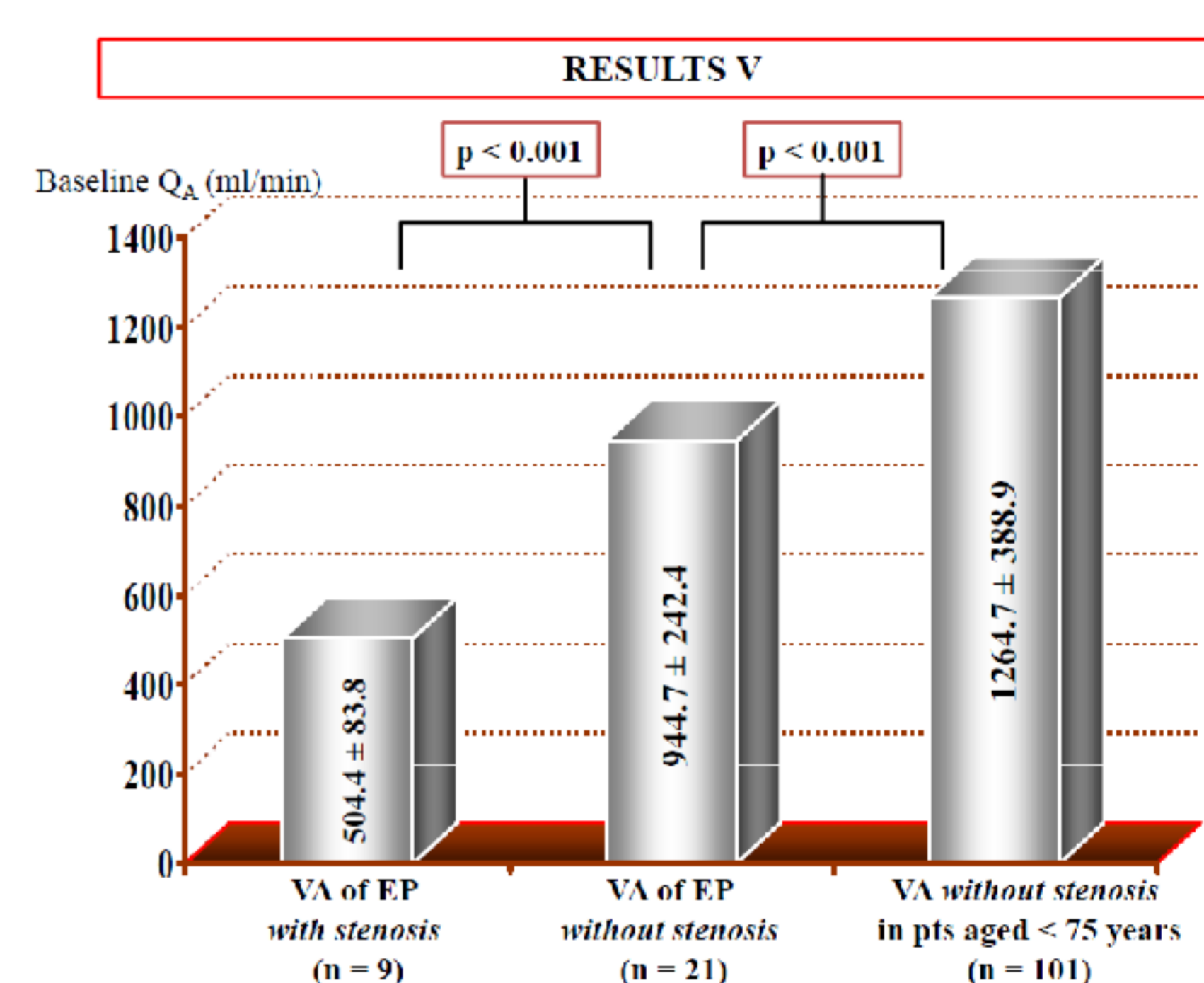
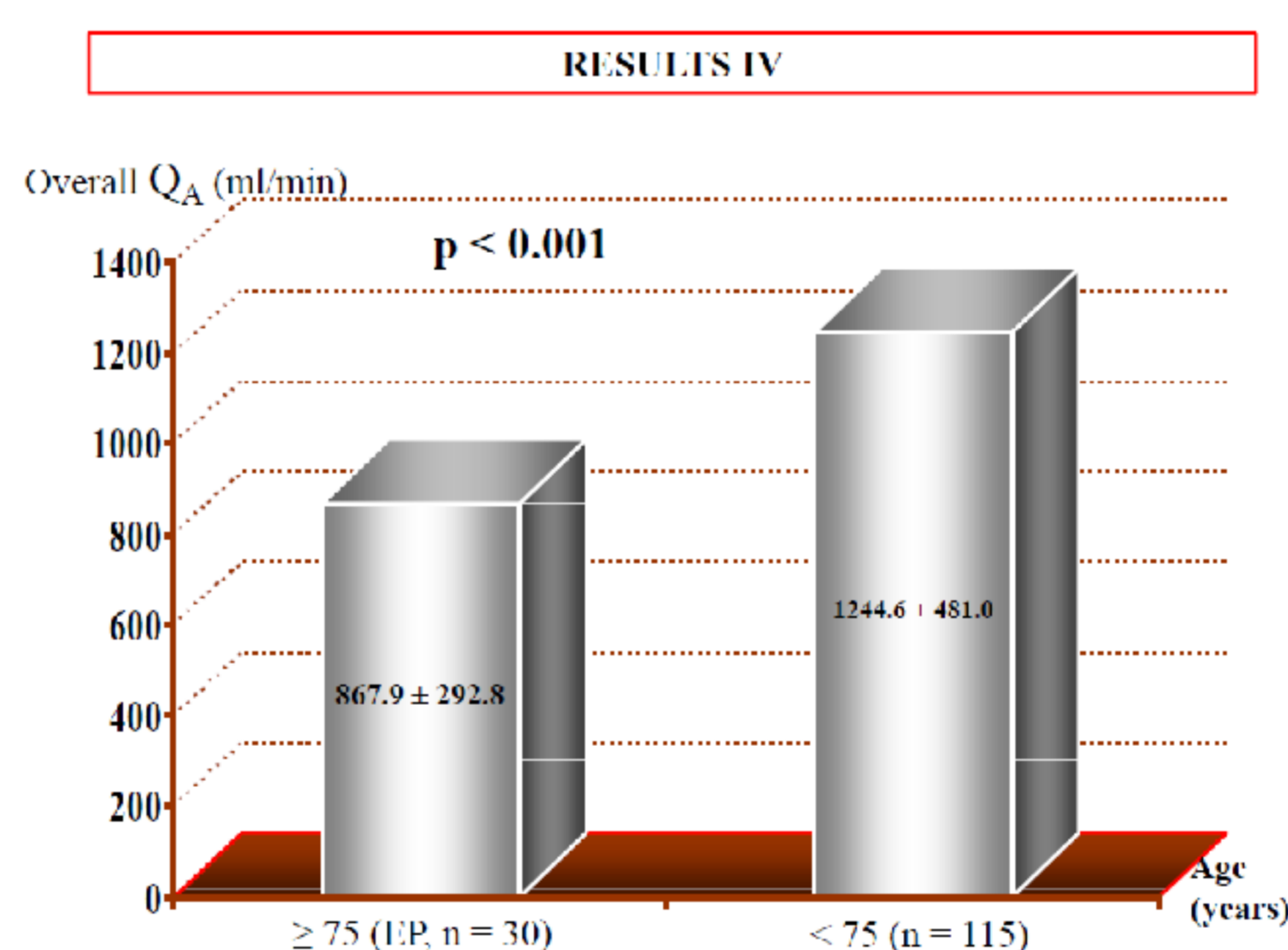
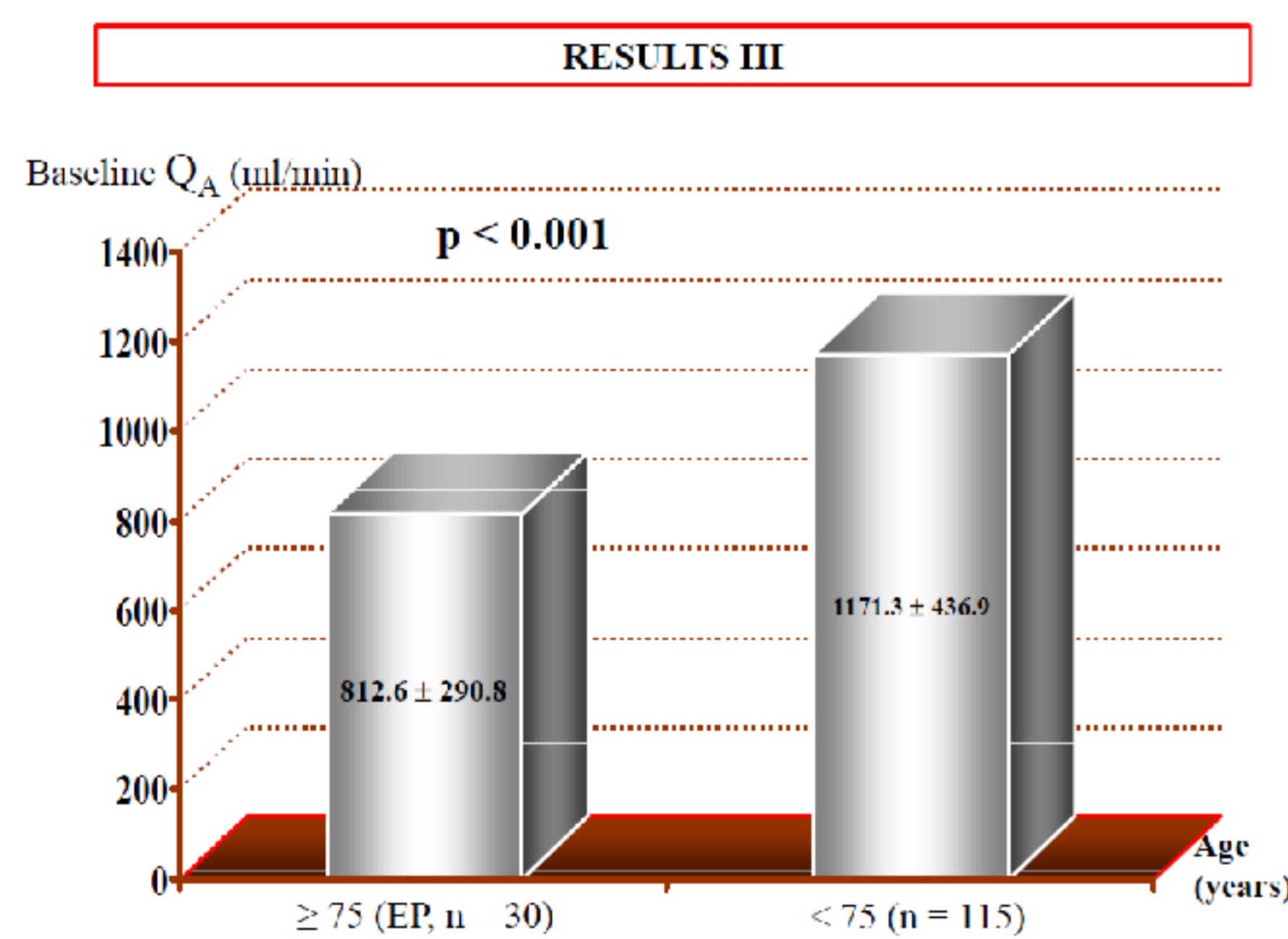
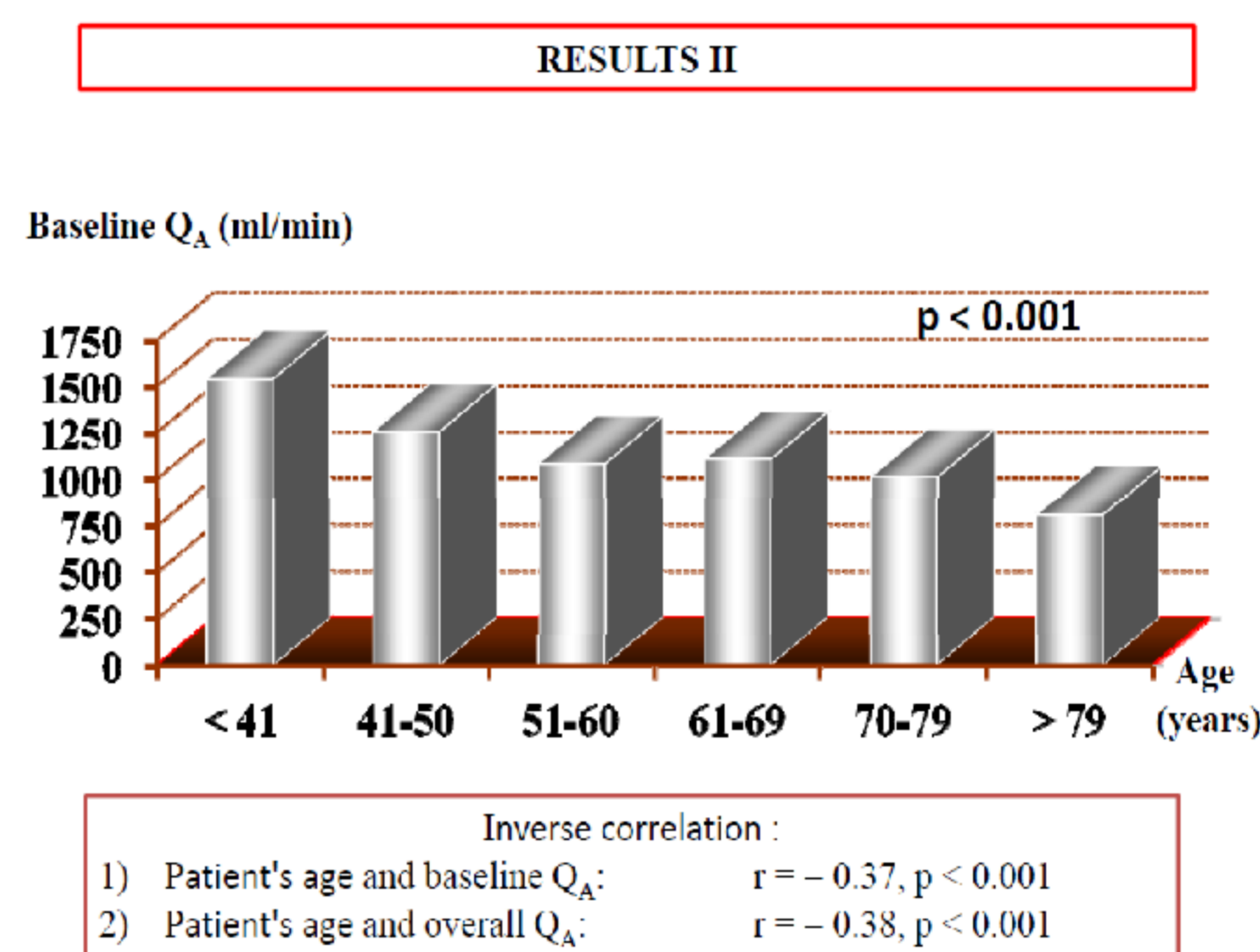
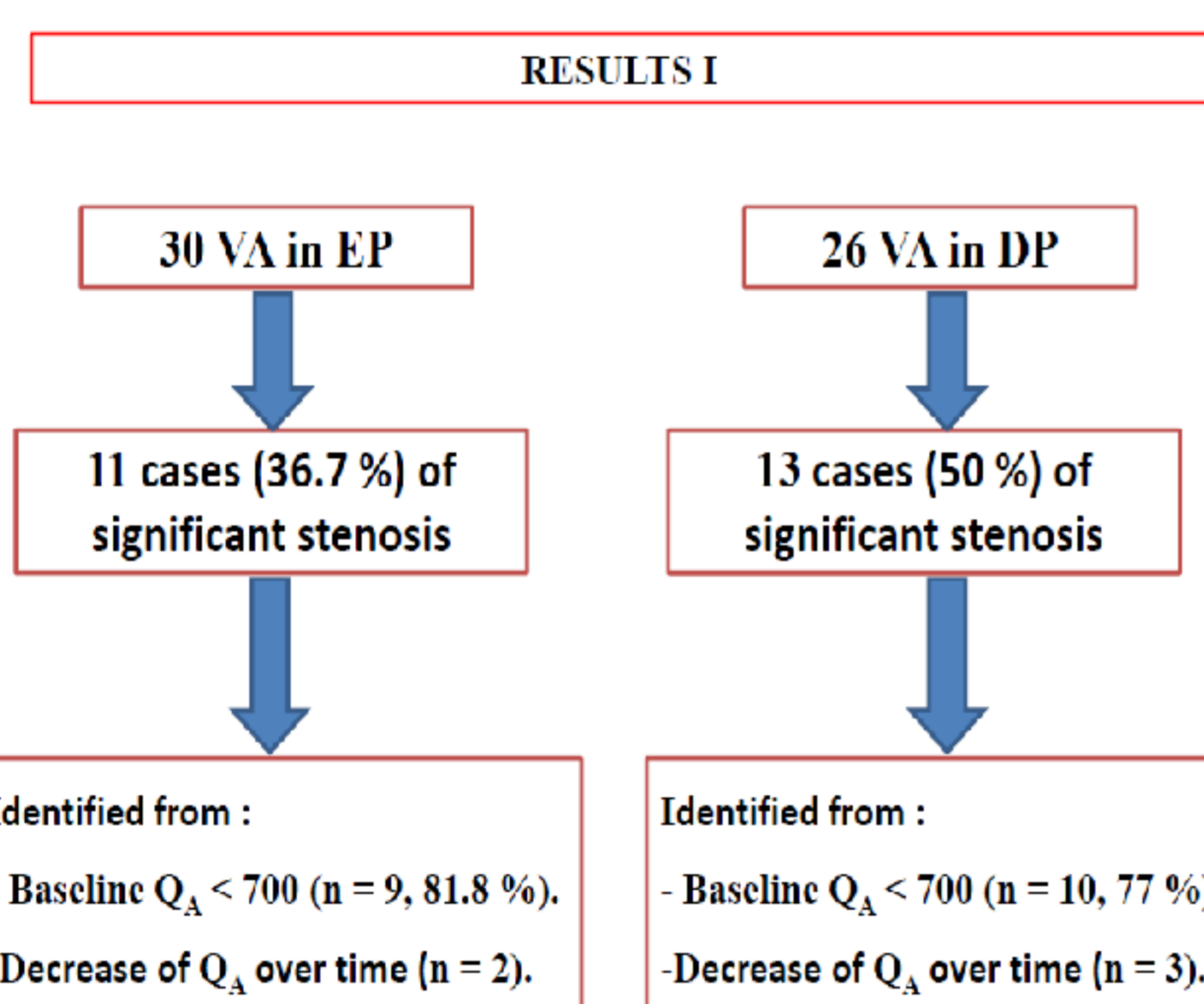
METHODS

- We prospectively monitored the Q_A of 145 VA (arteriovenous fistula AVF 84.1 % or graft AVG 15.9 %) during HD in 131 ESRD (age 62.6 ± 13.5 yr) pts over 5 year period. Of them, we analyze the function of 30 VA (AVF 73.3 %) in 28 pts (21.4 %) aged ≥ 75 years (elderly pts, EP) and 26 VA (AVF 84.6 %) in 25 pts (19.1 %) with diabetic nephropathy (diabetic pts, DP).

- The Q_A was measured, at least every 4 months, within the first hour of the HD session by the Delta-H method.

- All VA with baseline Q_A lower to 700 ml/min or Q_A decreased more to 20 % from baseline over time met the positive evaluation criteria and were referred for angiography plus subsequent elective intervention if VA stenosis ≥ 50 %.

RESULTS



CONCLUSIONS

- 1) The VA function is related to patient's age and diabetic status.
- 2) The functional VA impairment linked to age seems to be not stenosis-dependent and could be secondary to the changes of the vessel wall related to the aging process.
- 3) The functional VA changes recorded in diabetics seem to be secondary to stenosis development.