# Stroke in prediabetic patients

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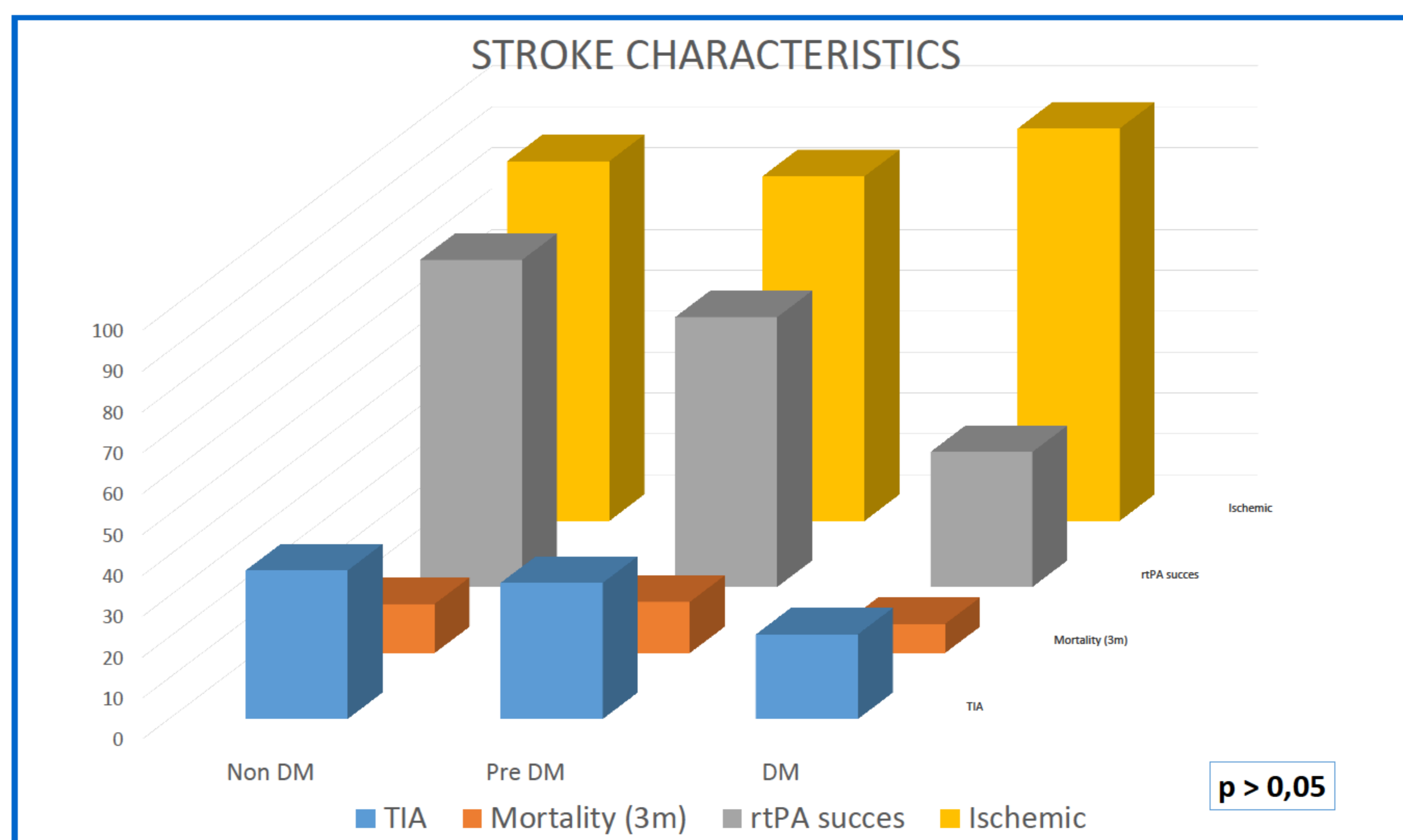Mancha Centro General Hospital. Alcázar de San Juan (Spain).

Objective: To describe the clinical characteristics of stroke in patients with prediabetes (pre-DM) and to compare them with diabetes mellitus (DM) and non DM patient characteristics.

Methods: Retrospective analysis of a prospective series of acute stroke patients. Demographic and clinical characteristics were compared between the three groups, along with outcome data. Stroke severity was evaluated by modified Rankin scale (mRS) and NIHSS (NIH stroke scale).

## RESULTS

| Baseline data | Non DM n 50 | Pre DM n 32 | DM n 56 | p | p* | P** |
|---|---|---|---|---|---|---|
| Age, median years | 74,50 ± 15,34 | 73,38 ± 13,20 | 73,84 ± 11,44 | ns | ns | ns |
| Sex (male), n (%) | 22 (44) | 17(53,1) | 33 (58,9) | ns | ns | ns |
| Arterial Hypertensión n (%) | 23 (46) | 23 (71) | 50 (89) | <0,05 | ns | <0,05 |
| Hypercholesterolemia, n (%) | 21 (42) | 21 (65) | 39 (69) | <0,01 | <0,05 | ns |
| Coronary artery disease, n (%) | 5 (10) | 2 (6,2) | 9 (16) | ns | ns | ns |
| Previous stroke, n (%) | 9 (18) | 3 (9) | 20 (35,7) | <0,05 | ns | <0,05 |
| Peripheral artery disease, n (%) | 2 (4) | 2 (6,2) | 4 (7,1) | ns | ns | ns |
| Atrial fibrillation | 3 (6) | 5 (15,6) | 9 (16) | ns | ns | ns |
| Current smoking, n (%) | 7 (14) | 5 (15,6) | 4 (7,5) | ns | ns | ns |
| Hb A1c (%) | 5,30 ± 0,77 | 5,76 ± 0,30 | 7,50 ± 1,87 | <0,001 | ns | <0,001 |

There were no differences in stroke severity between non-DM, pre-DM and DM patients (4,9 ±6,2; 4,5±6; 4,91±5,4 NIHSS median points each group), neither in 3-month Ranking scale (2,18 ±2,21; 1,81 ± 2,2; 1,96 ± 1,92).



## Conclusions

Prediabetes frecuency is higher than observed in general population (10%).
Prediabetic patients occupy an intermediate situation regarding vascular risk factors (hypertension and hypercholesterolemia) but has no impact on stroke outcomes.