

Cardiovascular complications in type 1 diabetic patients

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BACKGROUND:

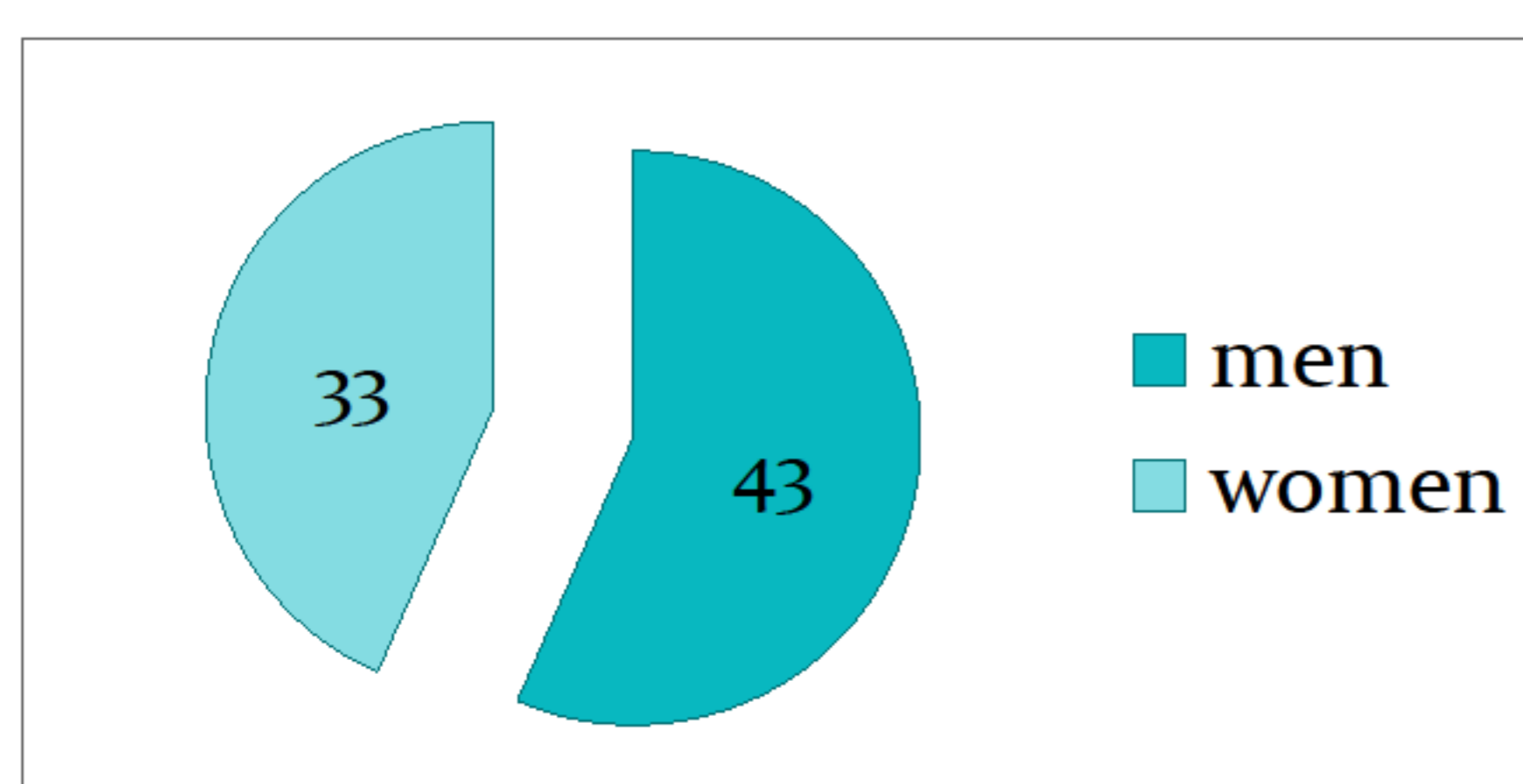
Although the issue of cardiovascular complications in type 2 diabetic patient is widely discussed and recommendations for such screening are known ,it's less common to do so for type 1 diabetes mellitus(T1DM) . Unfortunately, the mortality rate due to vascular complications is higher among type 1 diabetic patients than in the general population.

PATIENTS AND METHODS:

Seventy six patients with T1DM history over 20 years were included in our study . We analysed the occurrence and risk factors of diabetic complications.The following risk factors were considered : BMI,diabetic control (HbA1c), lipid profile ,hypertension ,smoking ,alcohol consumption and family history of cardiovascular diseases (CVD)including myocardial infraction (MI),stroke and peripheral arterial disease (PAD)

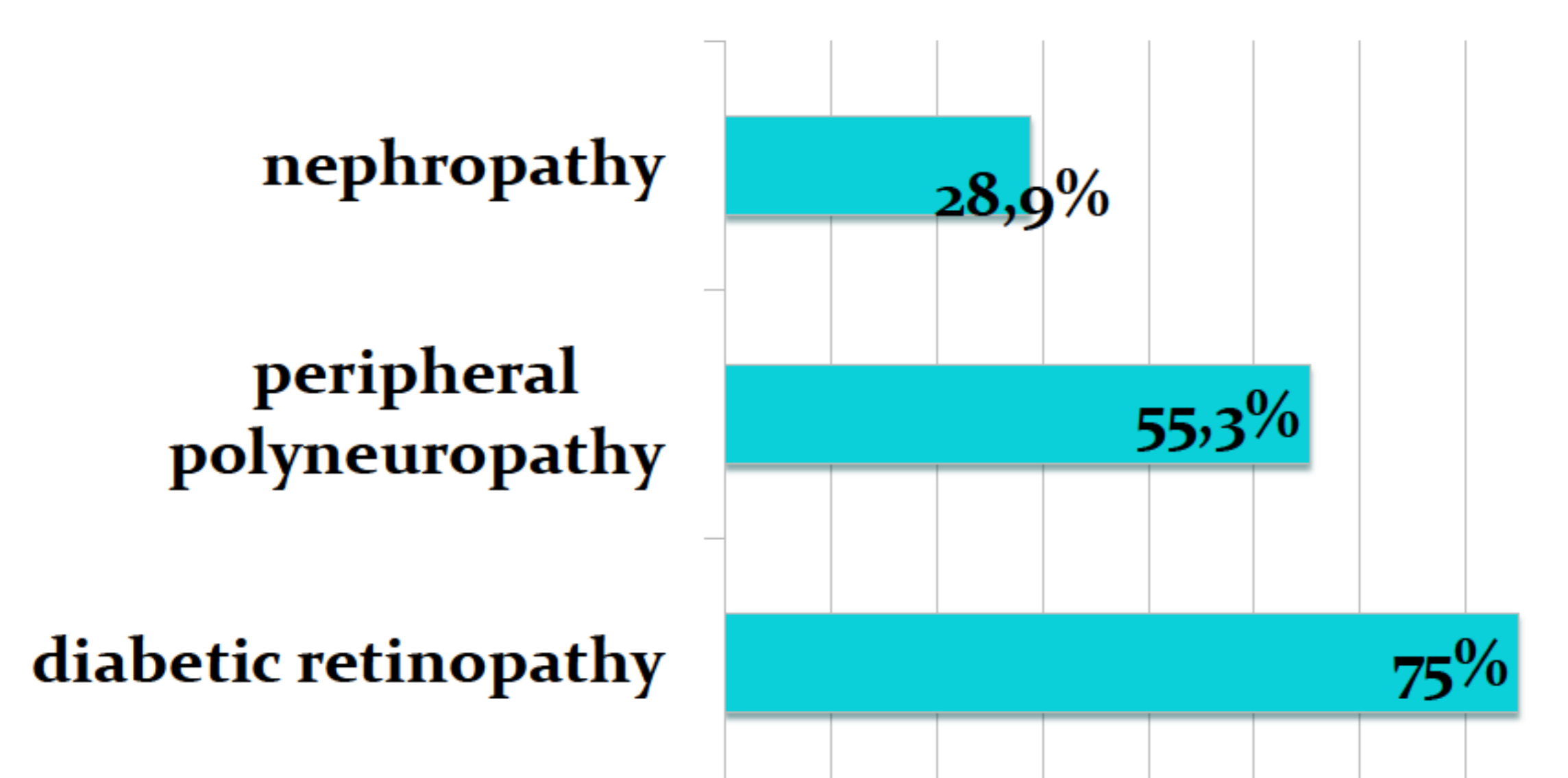
RESULTS:

-Gender:



- mean age was 39,9 years \pm 9,5(24-61 years)
- mean diabetes duration was 28,18 \pm 5,9 years
- the glycated hemoglobin was 10,26 \pm 1,76%.
- Smoking was present in 23,7% of our patients
- hypertension was associated in 25,3 \pm 4,3% and dyslipidemia in 11,3 \pm 3,18 %

- Microvascular complications:



- Nine patients had cardio vascular complications:

	Age	Sexe	Diabetes duration(y)	Severe hypoglycemia	smoking	HTA	nephropathy	CVD
N° 1	31	F	25	0	No	yes	No	MI PAD
N°2	45	F	27	2	No	no	no	stroke
N°3	55	M	24	2	Yes	No	No	stroke
N°4	61	F	39	0	No	Yes	No	stroke
N°5	47	F	33	5	No	Yes	No	stroke
N°6	41	M	23	5	Yes	Yes	yes	PAD
N°7	24	M	22	4	Yes	yes	YES	Stoke
N°8	45	M	30	2	No	Yes	NO	MI
N°9	53	M	33	1	No	Yes	yes	MI Stroke

CONCLUSIONS:

Beyond 20 years of diabetes history, cardiovascular complications dominate the prognosis of type 1 diabetic patients. They are frequent and severe , and often underestimated and undertreated . For that ,it's imperative to consider CVD as early as possible to offer early cardiac follow up in the affected patients . Finally, there is a serious lack of information concerning cardiovascular disease in type 1 diabetes and clinician and patient are urged to minimize cardiovascular risk by rigorous glycemic ,lipid and blood pressure control

References:

- Cardiovascular complications in type 1 diabetes mellitus ,M.-C. Brindisi et al. / *Diabetes & Metabolism* 36 (2010) 341–344
- Type 1 diabetes and coronary heart disease ,*DIABETES CARE*, VOLUME 29, NUMBER 11, NOVEMBER 2006

