



WEIGHT STATUS AND CARDIOVASCULAR DISEASES IN NEWLY DIAGNOSED DIABETES

Andreea Morosanu^{1,2}, Magdalena Morosanu¹ - ¹Diamed Obesity SRL, Galati, Romania, ²“Dunarea de Jos” University of Galati, Crossborder Faculty, Romania

BACKGROUND AND AIMS

Prevalence of diabetes is increasing exponentially and obesity is usually associated with the appearance of diabetes. Cardiovascular diseases (CVD) can be present since diagnosis of the disease or can be consequences of diabetes. The aim was to evaluate weight status and cardiovascular diseases in newly diagnosed diabetes.

METHODS

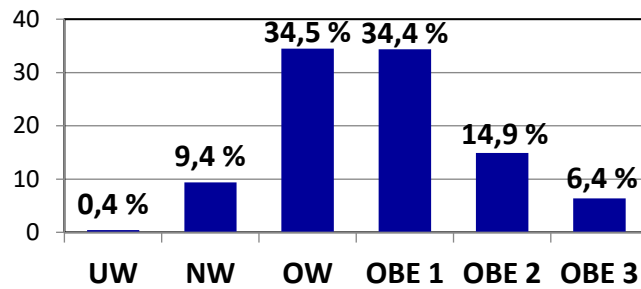
Study group: 3084 newly diagnosed persons with diabetes (2006-2011) in Galati county, Romania, age: 58,6 ± 11,2 years, gender: 47,9% men, 52,1% women.

Retrospective data at diagnosis of diabetes:

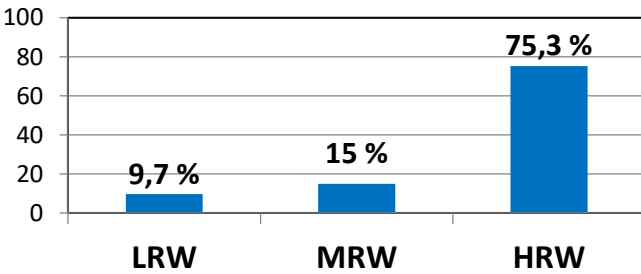
- **Anthropometric parameters:** body mass index (BMI), abdominal circumference (AC), weight categories: underweight (UW), normal weight (NW), overweight (OW), obesity (OBE1, OBE2, OBE3), abdominal obesity categories (low risk waist (LRW), medium risk waist (MRW), high risk weight (HRW)).

- **Presence of cardiovascular diseases (CVD):** systolic and diastolic blood pressure (SBP, DBP), hypertension (HT), chronic ischemic heart disease (CIHD), stroke, chronic peripheral arteriopathy (CPA) at diagnosis of diabetes mellitus.

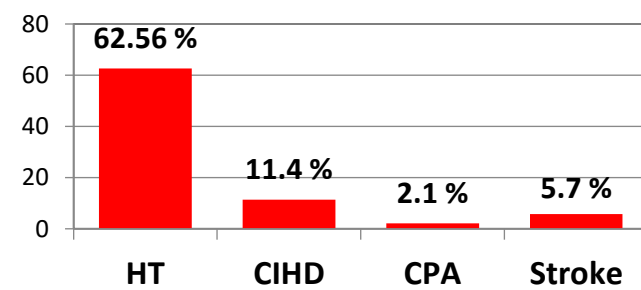
WEIGHT STATUS (BMI)



ABDOMINAL OBESITY (AC)



CARDIOVASCULAR DISEASES (CVD)



	Mean ± SD
BMI (kg/m ²)	30,89 ± 5,66
AC (cm)	103,87 ± 13,73
SBP (mmHg)	143,55 ± 23,42
DBP (mmHg)	79,96 ± 12,49

Chi square, Spearman	General obesity	Abdominal obesity
HT	OBE1, 2, 3 (p<0.001)	HRW (p<0.001)
CIHD	Direct correlate (p=0.021)	HRW (p=0.070)
CPA	NW, OW (p=0.008)	LRW, MRW (p<0.001)
Stroke	NW (p=0.007)	-

RESULTS

Presence of CPA was inversely correlated with weight (p<0.001), more frequent in OW and NW (p=0.008), was inversely correlated with AC (p=0.001) and was more frequent in LRW and MRW (p<0.001).

CIHD was directly correlated with weight category (p=0.021), and directly correlated close to significance with AC (p=0.070).

Stroke was inversely correlated with weight category (p=0.021), was more frequent in NW (p=0.007), and was not related with abdominal obesity (p=0.671).

SPB and DBP were strongly directly correlated with weight and waist categories (p<0.001).

CONCLUSIONS

Macrovascular diseases (CPA, stroke) were mostly related with normal weight and low risk waist at diabetes diagnosis. CIHD and HT were directly related with degree of obesity and abdominal obesity.

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