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CENTRAL OBESITY AND ACUTE CORONARY SYNDROME

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ABSTRACT

Background: The I.H.D is the first most important cause of death all over the world. Central obesity is highly associated with ischemic heart disease (1). As it's the 5th most important risk factor for ischemic heart disease. Central obesity gives both visceral and subcutaneous fat and hence total fatness, BMI is a poor index than central fatness (2).

Aim:

To know the percentage of patient with Acute Coronary Syndrome (a.c.s.) has central obesity.

Patients and methods:

220 patients with a.c.s were admitted to the c C.C.U of Sheikh Zayed Hospital within 2 months (January _February 2019).

If patient has STEMI and within 12h from beginning of chest pain to arrival to the hospital and if there are no contraindications, the patient is given fibrinolytic treatment and if available referred to other hospital for Percutaneous coronary intervention (p.c.i.) usually patient stayed 5 days in the C.C.U. if there is no complication.

Result:

Of 220 case of a.c.s (MI and U.a.)

There were 117 patients with MI (53%) and 103 patients with u.a (47%)

we consider obese patient those with waist circumference 94_102 cm for men and 80_88 cm for women.

The obese patients in the study 123 (56%) and non-obese 97 (44%)

Those 123 obese patients 60 (49%) male and 63 patient (51%) female the bulk of patient with a.c.s mostly at sixties age group as comprising 30%of total patient with a.c.s and fifties form 26% and seventies 15%.

Discussion:

So we consider in our study central obesity by measuring the waist circumference according to guideline (international diabetes federation)(3).

In our study showing that patient with increasing weight 123 patient of 220 more in female than male. 60% for male. 63% for female.

Most cases of a.c.s is within sixties age group than in seventies and the last is fifties.

Keywords: Obesity, Coronary, Hypertension

INTRODUCTION

The I.H.D is the first most important cause of death all over the world. Regarding Inter heart study (4) , the important risk factors are:

1. Hypertension
2. Diabetes mellitus
3. Smoking
4. Dyslipidemia
5. Central obesity(5)
6. Diet (high vegetable and fruit, low unsaturated fatty acids)
7. Inactivity
8. Alcohol
9. Psychosocial

Central obesity is highly associated with ischemic heart disease(1). As it's the 5th most important risk factor for ischemic heart disease. Central obesity gives both visceral and subcutaneous fat and hence total fatness, BMI is a poor index than central fatness(2).

In this study we deal with central obesity as a risk factor in the C.C.U of Sheikh Zayed Hospital for 2 months duration. The cases included MI either ST-Elevation Myocardial Infarction (STEMI) or Non-ST-elevation myocardial infarction (NSTEMI) and unstable angina (u.a)

Our C.C. Uis with 10 beds ward.

Aim:

Aim of our study to know the percentage of patient with Acute Coronary Syndrome (a.c.s.) has central obesity.

PATIENTS AND METHODS

220 patients with a.c.s were admitted to the C.C.U of Sheikh Zayed Hospital within 2 months (January _February2019).

If patient has STEMI and within 12h from beginning of chest pain to arrival to the hospital and if there are no contraindications, the patient is given fibrinolytic treatment and if available referred to other hospital for Percutaneous coronary intervention (p.c.i.) usually patient stayed 5 days in the C.C.U. if there is no complication.

For central obesity we measure abdomen circumference or waist circumference at the level of umbilicus and superior iliac crest and the patient in standing position.

Waist circumference (w.c.)

Normal

< 94 cm in men

<80 cm in women

High

94_102 men

80_88 women

Very high

>102 cm men

> 88 cm women

These figures for European, middle east and east Mediterranean area with ethnical variation as Chinese and Japanese were less than these figures

RESULTS

Of 220 case of a.c.s (MI and U.a.)

There were 117 patient with MI (53%) and 103 patient with u.a (47%)

we consider obese patient those with waist circumference 94_102 cm for men and 80_88 cm for women.

The obese patients in the study 123 (56%) and non-obese 97 (44%).

Those 123 obese patients 60 (49%) male and 63 patient (51%) female the bulk of patient with a.c.s mostly at sixties age group as comprising 30%of total patient with a.c.s and fifties form 26%and seventies 15%

age range 20_90 year

median age: 60

main age: 59

Table No. 1: Diagnosis and sex ratio

Diagnosis	**MI**	**117**	**53%**
	UA	**103**	**47%**
Sex	**M**	**132**	**60%**
	F	**88**	**40%**

Table No. 2: Age distribution of a.c.s

Age	**Fifties**	**Sixties**	**Seventies**
No.	**58**	**66**	**32**
%	**26%**	**30%**	**15%**

Table No. 3: No. and sex ratio of obese and non

Obese	Pt.No.	56%	male	60	49%
	123		female	63	51%
Non obese	Pt.No	44%	male	48	49%
	97		female	49	51%

DISCUSSION

The simplest way to measure central obesity which is the 5th most important risk factor for I.H.D (Interheart study)(4), and as the weight increasing in the developed and developing countries leading us to think more about it(6, 7). And as central obesity is related directly to I.H.D and atherosclerosis and indirectly by increasing insulin resistance and lipid and hypertension(8, 9) and DM by (10). So we consider in our study central obesity by measuring the waist circumference according to guideline(international diabetes federation)(3).

In our study showing that patient with increasing weight 123 patient of 220 more in female than male. 60% for male. 63% for female.

Most cases of a.c.s is within sixties age group than in seventies and the last is fifties

CONCLUSION

One of most important risk factors in C.C.U. patient is central obesity measured as waist circumference.

RECOMMENDATION

Effective weight lost program and exercise is better for heart and life.

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