### A STUDY OF THE ASSOCIATION BETWEEN EACH OF ALEXITHYMIA AND DEPRESSIVE SYMPTOMS WITH OBESITY IN A SAMPLE OF EGYPTIANS Tarek Kamal Molokhia, Ahmed Refat Rady, Mariam Mohammedi Radwan Abdelaziz Department of Neurology and Psychiatry, Faculty of Medicine, Alexandria University

## **INTRODUCTION**

Obesity is becoming extremely prevalent and it's a major health problem worldwide and in Egypt too. Obesity is a condition characterized by excessive accumulation of fat in the body. And it's defined as a BMI of 30 and above.

Years ago, it was believed that the correlation between depression and obesity was merely coincidental but recently a lot of research is revealing the mediating mechanisms between both. Studies suggested that different biological mechanisms linking these two conditions such as the involvement of the hypothalamic-pituitaryadrenal axis (HPA) dysregulation, inflammation, endocrinal system, as well as Genetic susceptibility. In addition to the behavioral and psychological aspects that may promote both conditions.

Alexithymia is one of the psychological traits that predispose to obesity and depression. And it reflects difficulty in emotional regulation and cognitive processing. In addition, it's characterized by three subscales: difficulty in indentifying emotions, difficulty in describing and external oriented thinking. Alexithymia and its subcomponents had been implicated in depressive disorders, binge eating disorders and obesity.



#### The aim of the present work is:

- To screen for depressive symptoms in obese persons.
- To assess the severity of depression (mild, moderate, severe) in obese persons.
- To examine for alexithymia symptoms in obesity.

**SUBJECTS AND METHODS** 

275 obese people were recruited from internal medicine clinics at Alexandria main University hospital and private nutrition clinics.

## **SUBJECTS AND METHODS**

#### All patients are subjected to the following:

- Detailed history taking
- Anthropometric measurements include (Body weight and height) to calculate Body mass index
- Full psychiatric interview using Structured Clinical Interview for DSM-5 (SCID) SCID-5-RV (Research Version)

•Arabic validated version of Beck depression Inventory (BDI)

•Arabic validated version of Toronto Alexithymia Scale TAS-20

# RESULTS

Table 1: Association between levels of depression (BDI) and alexithymia (TAS) among obese people (n=275)

	Severi	ity of Beck		Р	OR	
	Depression (n=204)	No depression <sup>®</sup> (n = 71)	<b>c</b> <sup>2</sup>			
Alexithymia						
Alexithymia	105	7		<0.001*	9.697	<
No and possible alexithymia <sup>®</sup>	99	64	37.778*			

Table 2: association between levels of depression (BDI) and level of alexithymia in both genders

Alexithymia	Severity of Beck							CT	
	Depression		No depression <sup>®</sup>		<b>c</b> <sup>2</sup>	Р	OR	<b>p</b> <sub>1</sub>	CI. 050/
	No.	%	No.	%					95%0
Male (n=48)	(n=3	2)	(n=	16)					
Alexithymia	13	40.6	2	12.5					0.029
No and possible	10	50.4	14	87.5	3.927*	$0.048^{*}$	4.789	0.061	0.928
alexithymia <sup>®</sup>	19	59.4							-24.715
Female (n=227)	(n=1'	72)	(n=55)						
Alexithymia	92	53.5	5	9.1					1 272
No and possible	90	165	50	90.9	33.567*	< 0.001*	11.500	< 0.001*	4.373
alexithymia <sup>®</sup>	80	40.3							-30.242

 $\chi^2$ : Chi-square test p<sub>1</sub>: p value for Odd`s ratio ®: Reference group

p: p value for Chi-square test for comparing between No depression and Depression from simple logistic regression OR: Odd's ratio C.I: Confidence interval



Figure: association between levels of depression (BDI) and level of alexithymia in both genders



\*: Statistically significant at  $p \le 0.05$ 

## **CONCLUSION**

#### From this study, it was concluded that:

- Depressive symptoms are more common among obese persons compared to the general population
- A positive correlation exists between body mass index and the severity of depressive symptoms.
- •Alexithymia is a risk factor for both depression and obesity.
- The prevalence of comorbid depression and alexithymia among obese persons was more common among female sex.

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5

