



ORIGINAL RESEARCH PAPER

Dermatology

A STUDY OF DERMATOLOGICAL PROBLEMS FACED BY OBESE PATIENTS:

KEY WORDS: Obesity, Dermatological problems, Fungal, Bacterial.

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ABSTRACT

Obesity is one of the main reasons for developing dermatological problems especially its rampant in young adolescent group. Obesity is said to cause a plethora of dermatologic diseases including acanthosis nigricans, acrochordons, keratosis pilaris, hirsutism, striae distensae, adiposis dolorosa and fat redistribution, lymphedema, chronic venous insufficiency, plantar hyperkeratosis, bacterial infections, skin infections, hidradenitis suppurativa, psoriasis and tophaceous gout. The target or aim of this study was to determine the various cutaneous manifestations in obese adolescents.

INTRODUCTION

Obesity is currently a major epidemic and has led to a significant increase in the number of obese adolescents attending dermatology OPD. Obesity is one of the main reasons for developing dermatological problems especially its rampant in young adolescent group. Obesity is said to cause a plethora of dermatologic diseases including acanthosis nigricans, acrochordons, keratosis pilaris, hirsutism, striae distensae, adiposis dolorosa and fat redistribution, lymphedema, chronic venous insufficiency, plantar hyperkeratosis, bacterial infections, skin infections, hidradenitis suppurativa, psoriasis and tophaceous gout. Many fungal and bacterial infections are known occur in obese people. The skin infections may be due to increased perspiration and also a small factor can be due to air tight pockets formed in between the skin folds.

The target or aim of this study was to determine the various cutaneous manifestations in obese adolescents.

AIMS AND OBJECTIVES:

The main aim is to find out the different kinds of skin problems in obese patients.

Materials and Methods

This study was done in the Department of Dermatology and the reports were collected and analysed with the help of Dr Shreesha Khandige.

Sixty obese patients were matched for sex and age with ninety controls (but not obese) and compared for the presence or absence of skin diseases.

The study was done from May 2017 to April 2018.

RESULTS

Table 1: Table 1: Age Distribution

Group	Number	Mean age	Std Deviation
Case	60	18.26 years	1.92 years
Control	90	19.20 years	2.98 years

Table 2: Presence and Absence of Disease

Parameter	Case	Control	p-value
Skin Disease	60 (60)	13 (90)	<0.05

• Skin Manifestation Frequency

- Acrochordons: 6s
- keratosis pilaris: 13
- hirsutism: 2
- striae distensae: 7

- adiposis dolorosa: 6
- Fungal: 19
- Cellulitis: 2
- Urticaria: 19
- Acanthosis nigricans: 34

These were the different skin manifestations that were appreciated in obese patients. It was also present in combination.

Table 3: Association with Diabetes and other co-morbidities:

Co-Morbidities	Frequency
Diabetes	2
Hypertension	07

There was a significant increase of resistance to treatment in patients with co-morbidity.

DISCUSSION

Obesity is one of the main reasons for developing dermatological problems especially its rampant in young adolescent group. Hud et al. Found that 74% of obese population shows AN along with elevated plasma insulin levels. Obese children with AN also have insulin resistance. In a comparative study performed by Boza et al., Boza JC, Trindade EN, Peruzzo J, Sachett L, Rech L, Cestari TF. Skin manifestations of obesity: A comparative study. J Eur Acad Dermatol Venereol 2012;26:1220-3. dermatoses that showed a statistically significant relationship with obesity, compared with the control group, were: Striae (P < 0.001), plantar hyperkeratosis (P < 0.001), acrochordons (P = 0.007), intertrigo (P < 0.001), pseudoacanthosis nigricans (P < 0.001), keratosis pilaris (P = 0.006), lymphedema (P = 0.002), and bacterial infections (P = 0.05).

Obesity is said to cause a plethora of dermatologic diseases including acanthosis nigricans, acrochordons, keratosis pilaris, hirsutism, striae distensae, adiposis dolorosa and fat redistribution, lymphedema, chronic venous insufficiency, plantar hyperkeratosis, bacterial infections, skin infections, hidradenitis suppurativa, psoriasis and tophaceous gout. The presence of striae, pseudoacanthosis nigricans, and bacterial infections were also found to correlate with the degree of obesity. In another study among obese school children conducted in Saudi Arabia, the skin conditions that were statistically significantly associated with obesity included dandruff, acne, xerosis, acanthosis nigricans, folliculitis, alopecia, striae, and callosities. Obesity is one of the major public health

problems. It, directly or indirectly, starts unfavorable processes in almost all organ systems. Therefore, only a multidisciplinary care may secure treatment and rehabilitation of obese patients.

CONCLUSION:

Control of the dermatological complications of obesity play an important role in diminishing the morbidity of obesity.

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