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**THE PREVALENCE OF NICKEL DERMATITIS
AMONG MALES IN BAGHDAD**
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نسبة انتشار حساسية التماس بمادة النيكل بين الذكور في مدينة بغداد

الخلاصة:

لقد تبين ان نسبة انتشار حساسية التماس لمادة النيكل بين الذكور في مدينة بغداد كانت ٨.٤٪ (٧٢٩ / ٨٥٩٢) وذلك من خلال استجواب ٨٥٩٢ شخصا اختيروا بشكل عشوائي من جميع مناطق بغداد. كما تبين ان سير الساعة كان اكثر المواد سببا لحساسية التماس.

SUMMARY:

An epidemiological study, using questionnaire forms, was conducted to estimate the prevalence of nickel dermatitis among males in Baghdad. A prevalence rate of 8.4% (729/8592) was found. Watch straps were the most common sensitizers.

INTRODUCTION:

Nickel allergy is an important problem in everyday life. In many countries Nickel is the commonest sensitizer in females while allergy to nickel in males has been infrequent¹. In a previous study, a high prevalence rate of 29.2% (1461/4998) was found among Iraqi females². This study was conducted to estimate the prevalence of nickel dermatitis among males in Baghdad.

SUBJECTS AND METHODS:

Questionnaire forms were filled-out by 8592 males during a two-months period in 1986. The population sample included males from schools, institutes, colleges and visitors to outpatient clinics (except dermatology sections). The forms were distributed and collected by eight groups (five students in each

group) of well-instructed fourth year medical students. The groups were assigned to different districts of Baghdad City and each group was supposed to collect 1250 forms. However, the number of complete forms was only 8592; the rest were neglected. The cause of nickel dermatitis such as watch straps, shoe laces, pens ...etc, was enquired about, the Dimethylglyoxime (DMG) test was performed to detect nickel in such objects¹.

RESULTS:

A prevalence rate of 8.4% (729/8592) for nickel dermatitis was found among males living in Baghdad (Table 1). Watch straps were the most common sensitizers (Table 2).

Table 1. Prevalence of nickel allergy among males in different age groups

Age group (years)	Total no.	Nickel allergy	
		No.	%
-15	1110	106	9.5
16-20	2355	175	7.4
21-25	2037	162	7.9
26-30	827	77	9.3
31-35	643	65	10.1
36-40	390	43	11.0
41-45	448	40	8.9
46-50	434	43	9.9
50-	348	18	5.1
Total	8592	729	8.4

Table 2. Nickel source and its prevalence among 729 nickel-allergic males in Baghdad

Metal source	Nickel allergy	
	No.	%
Watch straps	431	59.1
Shoe laces	88	12.1
Pens	83	11.4
Coins	32	4.4
Keys	39	5.3
Buttons	7	1.0
Others	49	6.7
Total	729	100.0

nickel sensitivity as well as female to male ratio varies from 14.3% were reported from different clinics^{1,3-5}. The female sensitive individuals is generally high, and in six Scandinavia varied from 2:1 to 15:1⁶. In Kuwait, however, the ratio was the greater exposure of men to nickel⁷. In Iraq, a high prevalence of 23.2% was found among females². This, if compared with the results of this study, a female to male ratio of 3.5:1 is obtained. However, the prevalence of nickel dermatitis whether in males or females in Iraq is higher than in other countries⁸. The hot climate and the increased use of nickel-containing objects may be the precipitating factors.

In this study wrist straps were the most common cause of nickel dermatitis. The back of the watches are made of brass plated with nickel and in many watches the winding wheel and the metal bar to hold the strap are nickel plated which are unsuspected sources of nickel contact.

The prevalence of nickel sensitivity is high in Iraq. Health education programs and regulations regarding the manufacture of nickel-containing objects should be considered.

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