

TREATMENT OF SKIN LESION AND SEBORRHOEIC DERMATITIS WITH VITAMINS (B₂, B₆)⁺

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Abstract

During two years period 373 Cases of infants and young children with skin rash and seborrhoeic dermatosis were managed in private medical clinic in Basrah city.

Vitamins (B₂,B₆) deficiency was detected in 139/373(37.3%) and mixed infection with bacterial, fungal, and allergic cases were detected in 234/373 (62.7%).

The vitamins deficiency was more common among children from rural areas (44%) than from urban areas (28,6 %). The prevalence rate of vitamins (B₂,B₆) deficiency was lower in infants who were breast-fed (15.7%) than in bottle -fed (58.2%) or those who were combined - fed (41,4 %) .

Eighty infants were treated with vitamins (B₂,B₆) and 59 infants treated with local antibiotics and antifungal ointment as tetracycline and fugidin ointments respectively.

The cure rate was (91.3%) in vitamins (B₂,B₆) treated group and (8.5%) in the Control group.

المستخلص

خلال سنتين تم التحري عن ٣٧٣ حالة من الأطفال الرضع والأطفال دون سن السنتين من العمر مصابين بالتهاب الجلد الزهمي ، تمت معالجتهم في عيادة خاصة للطب الباطني في محافظة البصرة .

اظهر البحث وجود نقص فيتامين ب٢ وب٦ عند ٣٧٣ / ١٣٩ (٣٧,٣ %) ، وهناك خليط من الالتهابات البكتيرية والفطرية والحساسية وجد عند ٢٣٤ / ٣٧٣ (٦٢,٧ %).

كان نقص الفيتامينات اكثر بين الأطفال من سكان الأرياف (٤٤ %) مقارنة بسكان المدن (٢٨,٦ %) ، وكان انتشار نقص الفيتامينات اقل عند اطفال الرضاعة الطبيعية (١٥,٧ %) من أطفال الرضاعة الاصطناعية (٥٨,٢ %) وكذلك اطفال الرضاعة المختلفة (٤١,٤ %)

ثمانون من الاطفال المصابين بنقص الفيتامينات (ب٢،ب٦) ، تم علاجهم بإعطائهم فيتامينات (ب٢،ب٦) ، والتسعة والخمسون الحالة الباقية تم علاجهم بإعطائهم مرهم مضاد حيوي.

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وقد وجد ان نسبة الشفاء في المجموعة التي عولجت بالفيتامينات كانت (٩١,٣%) وفي المجموعة التي عولجت بالمرهم كانت (٨,٥%) .

Introduction

There are three kinds of disorders of vitamins nutrition and metabolism: deficiency, toxicity and dependency. Deficiency arises from inadequate intake [1-2-3] and is common in Basrah city south of Iraq ,due to the embargo, it also occurs secondary to diseases that impair intake, absorption and transport of vitamins. [1,4]

Throughout the world vitamins (B₂,B₆) have been found to be one of most important etiology of skin lesion and seborrheic dermatosis.

This research considers vitamins (B₂,B₆) only which lead to skin rash and seborrheic dermatosis.

The research to be reported here was carried out to investigate the prevalence of vitamins (B₂,B₆) deficiency among infants and young children with skin rash and seborrheic dermatosis in Basrah city south of Iraq, also to investigate the relation between such prevalence and selected variables such as age, sex, feeding practice, rural and urban residence. The research also attempts to treat the cases with vitamin deficiency and follow the result.

Materials and Methods

The study was conducted over 12 months period (2001- 2002) in private medical clinic . A total of (373) infants and young children under two years of age with skin rash and seborrheic dermatosis were subjected for investigation .

The vitamins (B₂,B₆) deficiency were diagnosed by clinical examination of the skin lesion. Then skin lesion swabs were taken for laboratory and microbiological examinations.

Microbiological investigation: Skin lesion swabs were analyzed for detection of microorganisms by culture method. The pathogens: bacteria as staphylococci and streptococci , dermatophyte fungi , and allergic conditions were identified in 234 cases.

The vitamins deficiency (139) cases were divided randomly into two groups. The first (80) cases were given vitamin (B₂ , B₆) in a dose of (5-10) mg/day and (0.5-1) mg/day respectively according to the age and body weight for ten days, after this period (10 days),we repeated clinical examination. The second groups (59) cases were given tetracycline and fucidine skin ointments. Parents of both groups were reassured and advised with regard to time and duration of treatment.

Results

Vitamins (B₂ , B₆) deficiency was detected in (37. 3)% of the skin rash and seborrheic dermatosis. Mixed infection (bacteria l,fungal, and allergic) was detected in(62.7%)(234/373) of the cases .

The number of cured patients in the vitamins (B2, B6) group was higher than control group. (91.3% , 8.5%) for vitamins group and control group respectively (table- 1)

Table (1) : Cure rate achieved in vitamins in relation to control group

Treatment	total	Cured(%)	Uncured(%)
Vitamins (B2, B6)	80	73 (91.3)	7 (8.7)
Antibiotics ointment	59	5 (8.5)	54 (91.5)

There was no statistical difference in our rate achieved between vitamins(B2,B6)deficiency and control group in relation to age(table 2)

Table-(2): Cured rate achieved in vitamins and control group in relation to age.

Age gups (months)	Total	Cured(%)	Uncured(%)
0 - 6	23	20 (87)	3 (13)
7 - 12	37	35 (94.6)	2 (5.4)
13 - 18	18	17 (94.4)	1 (5.6)
19 - 24	12	11 (92)	1 (8)

Vitamins (B2, B6) deficiency recovered in 42.5 % of males patients and (57.5 %) of females there was no statistical difference related to sex . (table 3)

Table(3) : Cure rate achieved in vitamins and control group in relation to sex .

Sex	Total	Cured(%)	Uncured(%)
Male	34	30 (88.2)	4 (11.8)
Female	46	43 (93.5)	3 (6.5)

There was predominance in vitamins (B2 , B6) deficiency recovery rate among rural population (44 %) against the urban population (28.6 %) , as shown in (table .4).

Table (4) : Effect of residence on the rate of vitamins deficiency.

Residence	Total	Vitamins deficiency	%
Rural	220	97	44
Urban	147	42	28.6

There was higher recovery rate of vitamins (B2, B6) deficiency among bottle – fed (58.2%) and combined – fed group (41.4 %) compared to (15.7 %) in those breast – fed group (tables 5) . There was higher rate of vitamins deficiency among rural population who were bottle – fed or combined –fed .

Table(5) : Effect of feeding practice on the rate of vitamins deficiency .

Type of feed	Total	Vitamins deficiency	%
Breast – fed	140	22	15.7
Bottle- fed	122	71	58.2
Combined– fed	111	46	41.4

Discussion

Vitamins (B2 ,B6) deficiency was detected in (37, 3 %) of skin rash and seborrhoeic dermatitis cases . These results were higher than those reported from other studies , [4,5,6] this might be due to dietary deficiency of vitamins to the mother and her infant. These were the result of food embargo.

Skin infection due to bacterial , fungal and allergy were detected in (62.7 %) of skin disorder . These result were slightly higher than those reported from other studies . This might be due to poor hygienic standards. [4,7]

There was a predominance in the prevalence rate of vitamins deficiency among rural group of population against the Urban group, which might reflect the possible effect of parents understanding and education due to urbanization and influence of less sanitary habits and beliefs, in rural areas which significantly increase the risk of vitamins deficiency.

Human milk and colostrum of healthy mother contain all essential vitamins which prevent diseases [5,7].

The results in this research show high cure rate (91 . 3 %) among infants and young children with skin rash and seborrhoeic dermatosis due to vitamins (B2 , B6) deficiency after treatment with vitamins and good nutrition compared to (8.5 %) in the antibiotics and antifungal treated group.

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