

Isolation ,Identification and Survey *Sarcoptes scabiei*(Arachnida;Acarina) in Thi_Qar governorate

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Abstract :-

This study carried out in Thi-Qar governorate during the period from 2000 till 2002 . A total of 2152 patients visiting three important hospitals in Thi-Qar province were found infected with scabies disease .

The result appeared 772 patients in 2000 ,886 patients in 2001 and 494 patients in 2002 infected with *S.scabiei* . The current study revealed high infection in Al-Nasirya district 581 patients with 26.9% and less peak of infection in Al-Refai district 355 patients with 16.4% .

الملخص :

أجريت هذه الدراسة في محافظته ذي قار للأعوام 2000,2001,2002 . حيث تم متابعة 2152 مريض راجعوا المستشفيات المهمة في محافظته ذي قار أظهرت النتائج إن 772 إصابة حدثت في عام 2000 ، بينما سجلت 886 إصابة في عام 2001 في حين كان عدد الإصابات 494 أصابه في عام 2002 . الدراسة الحالية كشفت الارتفاع في حالات الإصابة بحلم الجرب في قضاء الناصرية لتصل 581 أصابه وبنسبه 26.9% وأقل أصابه حدثت في قضاء الرفاعي لتصل الى 355 أصابه وبنسبه 16.4%.

Introduction: -

There are several genera and species of itch mites most of which are in the family sarcoptidae .they produce severe mange in pets , domestic animals and wild animals , including pigs , foxes , gorillas and raccons (1)

Fortunately, they do not establish themselves in the skin of human . and at worst human contact may result in a slight rash of short duration . However, a single species of acaridid mite, *Sarcoptes scabiei* does infest human and commonly produce severe dermatitis . This disease is known as scabies . scabies may occur on any part of the body , but those regions most commonly affected are the interdigital webs and backs of the hands , beneath the breasts and between the belly folds of babies (2) .

S.scabiei burrowing under the skin to lay eggs . the burrows are often visible as lightly elevated , serpentine line about 1mm in width . however , scabies may appear as a variety of inflammatory lesions , many of them secondary infections from scratching . the mite is

transmitted by intimate contact, including sexual contact, and is most often seen in family members, nursing home residents and teenagers infected by children for whom they baby sit.

Materials and Methods: -

1-Sample collection: -

The samples collected from three important hospitals in Thi-Qar province (Al-Nasirya hospital, military hospital and primary health care center).

2-Diagnosis of parasite: -

The parasite diagnosis was done by hospital staff using Smith method, the affected area was scraped with a drop of glycerin or liquid paraffin either on the skin or scalpel blade. The skin sample was soaked in 10% KOH for 12 hours and mounted on the slide for microscopic examination or directly observing the eggs and mites (3)

3_Treatment of scabies: -

The recommended treatment is a solution of permethrin insecticide or gamma benzene hexachloride (lindane)

Results

The rate of infection with *S.scabiei* during year 2000.(1)

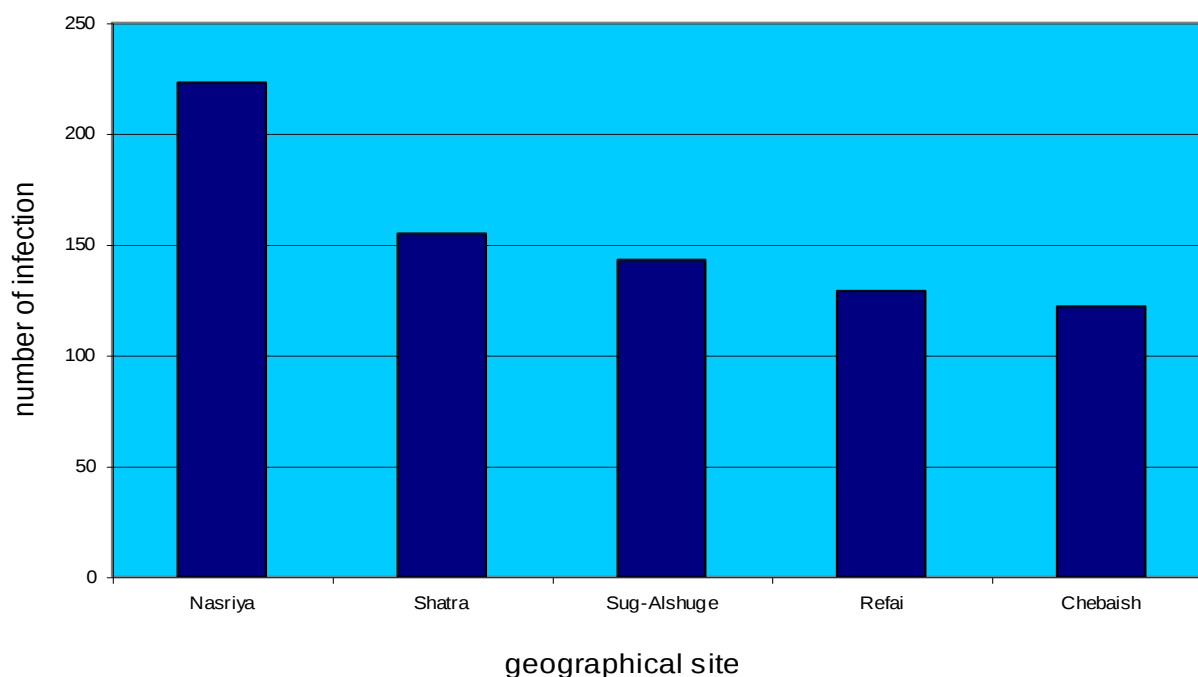
The research appeared high rate of infection in December about 94 cases with 12.6%. Where as 82 cases in January with 10.6%. And the result revealed less infection in November 41 cases with 5.31%. Table (1).

Table (1) number of infection during months (2000)

Months	Jan	Feb	mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
number of cases	82	77	72	79	67	66	53	53	46	42	41	94	772

(2): The relationships between severe infection and geographical site

The current study appeared 223 cases recorded in AL-Nasirya province with 28.88%. While the study recorded low infection in Al-Chebaish district 122 cases with 15.8%. Figure (1)



figure(1): number of infection in different site

3-The rate of infection with *S.scabiei* during year 2001.

The current study appeared high infection ration in May about 133 cases with 15% . Where as 111 cases in August with 12.5%. and the research appeared less peak of infection in July 52 cases with 3.8%. table (2)

Table (2) number of infection during months (2001)

Months	Jan	Feb	Mar	Apr	May	Jun	July	Augu	Sept	Oct	Nov	Dec	total
Number of cases	56	78	61	59	133	64	52	111	65	56	53	98	886

4-The relationship between severe infection and geographical site.

The present study appeared 227 cases recorded in Al-Nasirya province while 225 cases in Al-Shatra district with 25.3%. Where as the study recorded less in fections in Al-Chebaish district 139 cases with 15.6%. Figure(2)

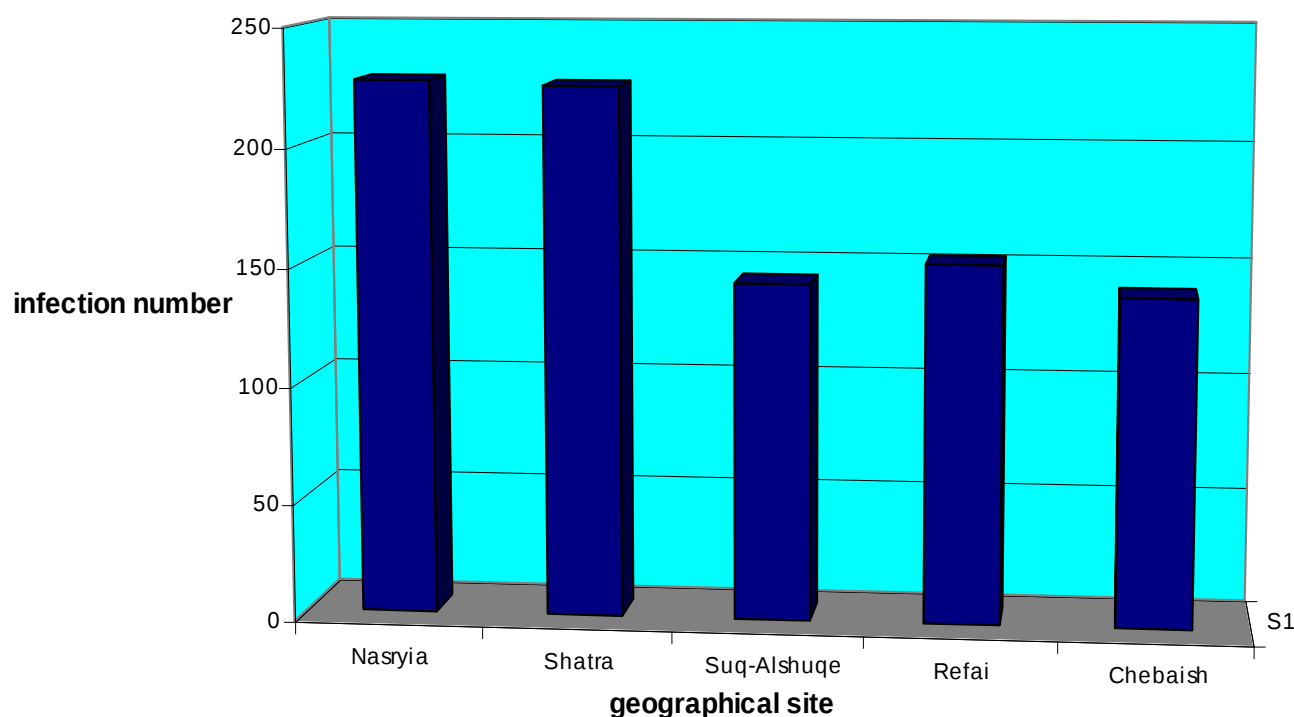


Figure (2):Number of infections In different sites

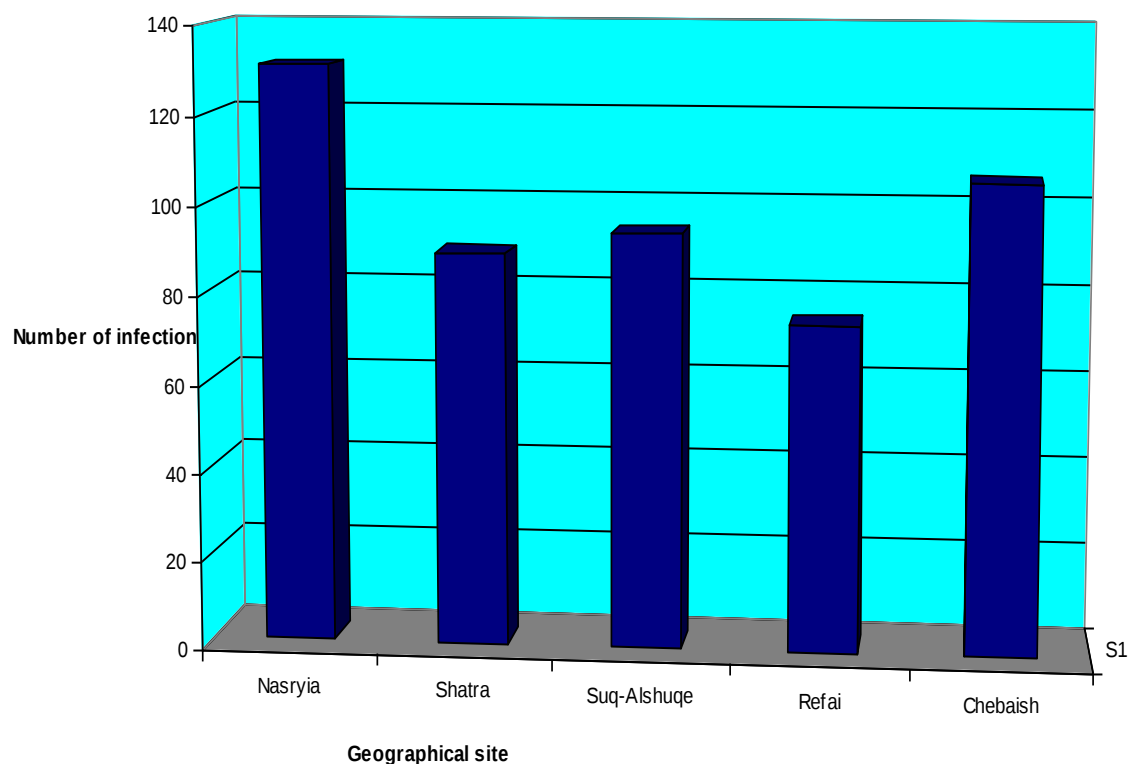
5 – The rate of infection with *S.scabiei* during year 2002.

During 2002 happened dramatic decrease in infection of scabies the cases low from 886 in 2001 to 494 cases in 2002.

The result appeared high peak of infections in May 72 cases with 14.5% and less infection in December 12 cases with 2.4%. While infection rate nearing in September and October 34 cases with 6.8%. Table (3)

Table (3) number of infection during months (2002)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Number of cases	45	54	46	62	72	42	40	31	34	34	22	12	494



Figure(3);Number of infection In different sites

6 –The relationship between severe infection and geographical site.

The result appeared more infectious in Al-Nasirya province 131 cases with 26.5% , then Al-Cheetahs district 106 cases with 21.4% and low peak infection happened in Al-Refai district 74 cases with 14.9% .figure (3)

Discussion: -

Sarcoptes spp mites are ectoparasites of all mammals but each mammalian host has its own race of *S. scabiei* , however , there is no remarkable morphological difference among mites that infest different hosts . (4)

The present study revealed that the hospitalized scabies in Thi-Qar province were more than in other region. It is regarded as arural region , poverty , poor sanitation and socioeconomic conditions of the population , these factors probably providing suitable environment for breeding of *S. scabiei* and subsequently increase the susceptibility of the population to infection (2)

The monthly distribution of total hospitalized scabies cases in the current study detected a higher peak of infection during may than other months and low peak occur in december in 2002, the high peak in may probably is a suitable season for breeding of *S. scabiei* . Mammals with mange sometimes suffer weight loss , changes in the skin , inflammation and irritation . severe untreated cases in mammals with compromised immune system may result in death (5) .

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