



## SPREADED SCABIES IN ELDER PATIENT - CASE REPORT

Shirisha M<sup>1\*</sup>, Preethi B<sup>1</sup>, Deepika S<sup>1</sup>, Pranathi Reddy R<sup>1</sup>, Mohan Kumar G<sup>2</sup>

<sup>1</sup>Pharm. D. student, Sri Venkateshwara College of Pharmacy, RVS Nagar, Chittoor 517127, Andhra Pradesh, India.

<sup>2</sup>Assistant Professor, Department of Microbiology, RVS Institute of Medical Sciences, Chittoor, Andhra Pradesh, India.

Corresponding Author:- **Dr. Shirisha M**

**E-mail:** sirilokesh517@gmail.com

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### ABSTRACT

*Sarcoptes scabiei* is the organism that is known to cause skin infection which is scientifically referred to as scabies. These micro-organisms are capable to live for months underneath the skin. The organisms over-weighs a length of about 0.5mm which is eight legged and *Sarcoptes scabiei* var. *hominis* is its scientific term. Along with other organisms that cause skin diseases like tinea and pyoderma, scabies is one of the most common skin disease in children. A 62 years old female patient was brought to the female medical ward with complaints of itching and redness on skin in the chin and cheek regions, pimple like bumps, irritation of skin and dryness since 1 month. Scabies is a very common skin disease observed in more number of patients, topical ointments like permethrin, benzyl benzoate lotion can completely cure the disease by using along with antihistamines at appropriate doses, the patient should also be provided with counseling for further prevention of infection.

### INTRODUCTION

*Sarcoptes scabiei* is the organism that is known to cause skin infection which is scientifically referred to as scabies[1]. These micro-organisms are capable to live for months underneath the skin[2]. The organisms over-weighs a length of about 0.5mm which is eight legged and *Sarcoptes scabiei* var. *hominis* is its scientific term[3]. Along with other organisms that cause skin diseases like tinea and pyoderma, scabies is one of the most common skin disease in children[4]. More than 1.5% of population have been identified to be affected with scabies in both genders all around the world as reported in 2010 analysis, which refers to about 100 million people of the overall world's population[5]. In 2009 it was estimated that about 300 million people of both the genders are affected with scabies all around the world[6]. Thus, from the various studies it was estimated that about 1 to 10% of the world's population is affected with scabies, and it may also vary from 50 to 80% in certain population[7].

### CASE STUDY:

A 62 years old female patient was brought to the female medical ward with complaints of itching and redness on skin in the chin and cheek regions, pimple like bumps, irritation of skin and dryness since 1 month. And also complained of increased over-all body irritation during night times. Patient was not a known case of diabetes, chronic kidney disease, bronchial asthma, and hypertension. Patient has no significant past medical and medication history, and was not undergone with any surgical procedures previously. Immunization of the patient was up to age in scheduled time intervals. She was not habituated for smoking, and was a teetotaler. Patient was reportedly allergic to brinjal and groundnuts, coming to marital status, she was unmarried.

**Table 1. Lab Investigations:**

Parameter	Observed value	Normal Value
Haemoglobin	11.3 g/dl	14-17g/dl
ESR	25 mm	5-20mm
TLC	14200 cells/mm <sup>3</sup>	4500-10,000 cells/ mm <sup>3</sup>
DC	N-68%, E-11%	N- 50-60%, E- 1-4%
Platelets	2.68cells/mm <sup>3</sup>	1.0-4.5 cells/mm <sup>3</sup>
PCV (%)	40%	40-53%
Sr. Creat (mg/dl)	5.6 mg/dl	8.5-10.2 mg/dl

It was provisionally diagnosed to be scabies by the physical examination and patient complaints. Skin biopsy was done and sent for immunophenotyping test for conformation of scabies. From immunophenotyping test results, it was diagnosed to be **SCABIES**.



**DISCUSSION:**

By observing the mite in the biopsy test, the therapeutic approach was taken to treat scabies. According to the European guidelines for management of scabies, the patient was prescribed with 5% Permethrin cream for topical application at the site of infection at a frequency of 2 times per day, and oral form 25%ulation of levocetirizine under the brand name of levocet at a dose of 5mg was prescribed which is advised for administration for two times a day.

Other drugs that can be prescribed in this case as per American Academy of Dermatology (AAD) includes the following:

- 25% benzyl benzoate lotion
- 10% sulfur ointment
- 10% crotamiton ointment
- 1% lindane cream
- Antihistamines like Benadryl (diphenhydramine) or pramoxine lition to help control itching.

All these are known to reduce irritation and erythema at the site of infection. And levocetirizine being a

antihistamine helps by suppressing the immune system reactions, thus, reducing the irritation and erythema at the site of infection.

The patient got completely cured from scabies which is clearly differentiated in figure 1 and figure 2. Patient was also educated with cause of scabies and the life-style modifications required for treating and preventing scabies. And asked to make bedding and clothing or clothes used next to the skin anytime during the 3 days before treatment should be machine washed and dried using the hot water and hot dryer cycles or be dry-cleaned for further prevention of scabies.

**CONCLUSION:**

Scabies is a very common skin disease observed in more number of patients, topical ointments like permethrin, benzyl benzoate lotion can completely cure the disease by using along with antihistamines at appropriate doses, the patient should also be provided with counseling for further prevention of infection.

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