



ORIGINAL RESEARCH PAPER

Dermatology

ORAL IVERMECTOL IN THE TREATMENT OF SCABIES

KEY WORDS:

Dr Anugrah Parikh	Department of Dermatology, Gujarat Adani Institute of Medical Sciences, Bhuj
Dr Rashmi Arora*	Department of Dermatology, Gujarat Adani Institute of Medical Sciences, Bhuj *Corresponding Author
Dr Yash Dhamecha	Department of Dermatology, Gujarat Adani Institute of Medical Sciences, Bhuj
Dr Rishi Patel	Department of Dermatology, Gujarat Adani Institute of Medical Sciences, Bhuj

Introduction

Scabies is caused by the mite *Sarcoptes scabiei*. Pruritus, the result of a hypersensitive reaction to the eggs, saliva, and fecal components of the mites, is the major symptom of scabies.^[1] It is highly contagious and may have the pathognomonic sign of burrows in addition to nocturnal pruritus and erythematous papules.^[2] It is a major global health problem in many indigenous and third world communities.^[3] Institutions such as nursing homes, extended-care facilities, and prisons are often sites of scabies outbreaks. Child care facilities also are a common site of scabies infestations.^{[4][5]} Scabies frequently occurs in body crevasses such as those between the fingers and toes, the buttocks, the elbows, the waist area, the genital area, and under the breasts in women.^{[6][7]} The face, neck, palms, soles and lips are usually not affected, except in infants or very young children.

Different therapies for scabies consist of oral or topical ivermectin and topical anti-scabietics such as benzyl benzoate, crotamiton, gamma benzene hexa chloride, and permethrin. All people in the household who have had close skin-to-skin contact with a scabies affected person during the past month must be treated. Ivermectin is an oral medication shown by many clinical studies to be effective in eradicating scabies, often in a single dose. It is the treatment of choice for crusted scabies and is often used in combination with a topical agent.^[8]

Material and Methods-

All consecutive cases attending our outdoor department were given 200 micro g/kg body weight of ivermectol in a single supervised dose on an empty stomach. The diagnosis of scabies was made by the demonstration of eggs, larva, mites/mite products or fecal pellets by light microscopy in the scrapings from multiple representative or suspected skin lesions in 10% KOH and/or the presence of at least three of the following clinical criteria (a) demonstration of burrow; (b) presence of scabetic lesions at the classical sites; (c) nocturnal pruritus; (d) family history of similar illness.

After taking detailed clinical pattern, infection and family history the following inclusion and exclusion criteria were formed. The inclusion criteria were set as-

1. Patients of either sex aged 7 to 80 years with clinically-diagnosed scabies,
2. Presence of typical scabietic lesions like papules, nodules, or vesicles at classical sites,
3. Presence of classical burrows on clinical examination,
4. Nocturnal pruritus,
5. History of involvement of family member or similar symptoms in contacts,
6. Microscopically-diagnosed scabies (demonstration of egg, larvae, mite, or fecal material),
7. Patients whose microscopic examination was negative, their inclusion in study was based on clinical criteria, for that patient had to satisfy at least 3 out of 4 inclusion criteria (inclusion criteria no. 2 to 5),
8. Patients who were willing to participate and give written informed consent

The exclusion criteria were set as

1. Patient treated with any topical scabicial therapy in the month before entry,
2. Patients taking any topical or systemic antibiotic therapy in the week before entry into the study,
3. Immunologically-compromised patients,
4. Having scabies with atypical presentation like crusted scabies or scabies incognito,
5. Patients with severe secondary bacterial infection,
6. History of allergy to any of the study drugs,
7. Blood pressure < 100/60mm Hg,
8. Pregnancy in women and lactating mothers
9. Patient who did not give consent to therapy.

Follow up was done every week for four weeks.

Observation and results-

Positive family history was present in 85% patients. Infection was present in 35% patients. Classical Scabies was found in 90% and Nodular in 10%. At first week follow-up, the decrease in number of lesions was maximum in 137/150 (91.3%) patients. The decrease in pruritus was 9/10 in 88% according to visual analog scale (VAS) was maximum at end of week 1. The most common age group was 20-25 year. Papular lesions were the most common presentation 108/150 (72.2%) followed by nodules 16/150(10.4%) and pustules 13/150(9%). The most common site of papules was interdigital clefts followed by axilla and trunk. The most common site of nodules was scrotum 14/16(90.9%). Cure rate was found to be 90% and recurrence of scabies was found in 3%. No side effects were observed in any cases.

Conclusion-

Oral ivermectin appears to be safe and effective in treatment of scabies.

References

1. Heukelbach J, Feldmeier H. Scabies. Lancet 2006;367:1767-74
2. Tajirian A, Schwartz R. Scabies and pediculosis: Biologic cycle and diagnosis. In: Micali G, editor. Videodermatology in Clinical Practice. New York: Informa Healthcare; 2010. p. 7-10
3. Scheinfeld N. Controlling scabies in institutional settings: A review of medications, treatment models, and implementation. Am J Clin Dermatol 2004;5:31-7.
4. Sharquie K.E., Al-Rawi J.R., Noaimi A.A., Al-Hassany H.M. 2012. Treatment of scabies using 8% and 10% topical sulfur ointment in different regimens of application. *Journal of Drugs in Dermatology* 11: 357-364.
5. Goldust M., Rezaee E., Hemayat S. 2012. Treatment of scabies: Comparison of permethrin 5% versus ivermectin. *Journal of Dermatology* 39: 545-547.
6. Chosidow O. 2012. Scabies and pediculosis: neglected diseases to highlight. *Clinical Microbiology and Infection* 18: 311-312.
7. Sivasubramanian G., Siddiqui M.F., Tangella K.R. 2012. Scabies crustosa following corticosteroid therapy in an elderly patient. *American Journal of Medical Sciences* 343: 248
8. Chhaiya S.B., Patel V.J., Dave J.N., Mehta D.S., Shah H.A. 2012. Comparative efficacy and safety of topical permethrin, topical ivermectin, and oral ivermectin in patients of uncomplicated scabies. *Indian Journal of Dermatology, Venereology and Leprology* 78: 605-610