

ORAL IVERMECTIN EFFECTIVENESS IN THE TREATMENT OF PERMETHRIN-RESISTANT SCABIES: A DESCRIPTIVE AND RETROSPECTIVE OBSERVATIONAL STUDY

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BACKGROUND AND IMPORTANCE

An increased incidence and resistance of *S. scabiei* to permethrin was observed in late 2020 possibly influenced by SARS-CoV-2 pandemic. Ivermectin is used as a therapeutic alternative for permethrin-resistant scabies. The recommended treatment consists of two single doses (SD) separated by 7-14 days.

AIM AND OBJECTIVES

- To assess the effectiveness of oral ivermectin as a treatment for topical 5% permethrin-resistant scabies in patients from a tertiary hospital.
- To analyze the characteristics of the sample and treatment.

MATERIALS AND METHODS

An observational, retrospective and descriptive study was done including patients who collected Ivermectin 3mg tablets in the Outpatient Pharmaceutical Care Unit of our hospital for the treatment of *S. scabiei* until April 2021. All patients had previously received 5% permethrin and treatment failed.

Ivermectin was considered effective in patients who were discharged from Dermatology Clinics or did not consult for itching or other symptoms beyond 4 weeks after the last dose. Sample and treatment variables were age, sex, antecedents within family nucleus or cohabiting cases and number of doses received.

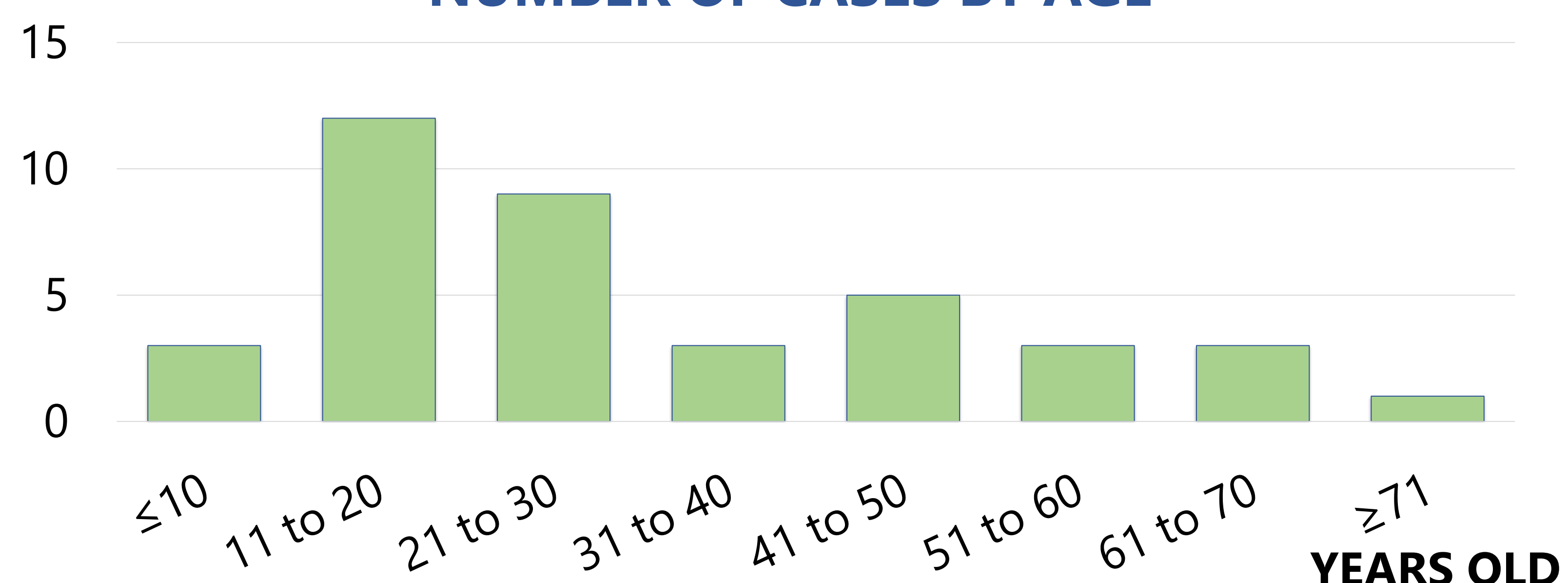
RESULTS

A total of 37 patients were included and 39 applications were made. There were a mean of 1.78 ± 1.79 applications/month [95%CI: 0,41-3,05] from April 2020 to December 2020 and $4,6 \pm 2.6$ applications/month [95%CI: 91,37-7,83] from January to April 2021.

Ivermectin was effective in 87,2% of cases. When therapeutic failure happened, treatment for a second time was required. It was unclear if treatment had been ineffective or reinfestation happened in one case. The mean age of the patients was $31,1 \pm 19,3$ years old (95%CI: 26,8-37,4) and the 54,0% (21/39) of them had between 11 and 30 years old.

	N	%
Women	24/39	58,5
Applications from April 2020 to December 2020	16/39	41,0
Applications from January 2021 to April 2021	23/39	59,0
Effectiveness	34/39	87,2
Two doses	22/39	56,4
One dose	17/39	48,7
Familiar history or cohabitants with scabies	29/39	74,4

NUMBER OF CASES BY AGE



CONCLUSION AND RELEVANCE

In our sample, effectiveness of Ivermectin was greater than 80% in scabies resistant to topical 5% permethrin and seems independent of the number of doses received. Results suggest that scabies mainly affects women and young people. Infestations in cohabitants seem to have increased and may have been influenced by SARS-CoV-2 pandemic, associated with delays of treatments, as there were not any applications to treatment with Ivermectin before confinement and became more frequent during and after it.

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