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Prescription trends of antipsychotic medications in dermatology among Medicare patients, 2013-2020

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To the Editor:

Antipsychotic medications are useful in dermatological practice for treating a wide range of psychodermatologic disorders, including delusions of parasitosis and excoriation disorders [1]. Patients suffering from these disorders may benefit from psychiatric care, but poor insight into their condition can prevent them from seeing a psychiatrist [2]. When dermatologists are able to recognize and treat such disorders, they can improve patient outcomes, prevent patient harm, and reduce overutilization of the healthcare system [2]. However, dermatologists may feel ill-equipped to prescribe antipsychotics. One survey indicated that only 3% of dermatologists were comfortable prescribing antipsychotics [3] and another found that only 9% of dermatologists had prescribed an antipsychotic in the past six months [4]. The rate dermatologists prescribe antipsychotics is unknown and current research is limited to small sample sizes and survey studies.

In this study we used the Center for Medicare and Medicaid Services database to analyze antipsychotic prescriptions written by dermatologists from 2013 to 2020. We identified the number of claims filed for antipsychotic drug prescriptions written by dermatologists. Additionally, we report the number of dermatologists who had prescribed at least one antipsychotic each year. We included the following antipsychotic medications in our analysis: aripiprazole, clozapine, fluphenazine, haloperidol, olanzapine, paliperidone, pimozide, quetiapine,

risperidone, thioridazine, thiothixene, trifluoperazine, and ziprasidone.

Of 11,239 dermatologists included in the database, less than 1% prescribed antipsychotic drugs, ranging from 63-88 dermatologists each year. There were a total of 21,251 claims submitted by dermatologists for antipsychotic medications from 2013 to 2020. Trends remained relatively stable over the eight years of the study, with total prescription claims increasing by an average of 2% each year. Pimozide was the most frequently prescribed antipsychotic, with 5,078 (23.9%) claims. It was prescribed by 2% of dermatologists and prescriptions increased by an average of 1% each year. Quetiapine accounted for 4,771 (22.9%) claims, risperidone for 3,492 (16.43%) claims, and olanzapine for 3,089 (14.5%) claims. There were 1,677 (7.8%) claims made for aripiprazole, and prescription claims increased by an average of 15% each year (**Table 1**). Haloperidol (818 claims), clozapine (748 claims), thioridazine (170 claims), paliperidone (134 claims), ziprasidone (122 claims), paliperidone (87 claims), thiothixene (78 claims), and fluphenazine (70 claims) together accounted for 8.7% of total antipsychotic prescriptions submitted by dermatologists from 2013 to 2020.

Our findings indicate that dermatologists rarely prescribe antipsychotics. When they do, they most frequently prescribe pimozide. Pimozide has proven to be effective in treating psychodermatologic conditions, such as trichotillomania and

Table 1. Annual change in 30-day prescription claims for selected antipsychotics by dermatologists (2013-2020). The number of dermatologists who submitted at least one claim for an antipsychotic, the total number of 30-day prescription claims, and the annual rate of change are shown. Antipsychotics with less than 1,000 total prescriptions are not included in this table.

Psychiatric medication	Dermatologists prescribing (N=11,239)	Total 30-day prescriptions (% of antipsychotics)	Annual rate of change (2013-2020)
Pimozide	197 (2%)	5,078 (23.9%)	1%
Quetiapine	93 (1%)	4,771 (22.9%)	8%
Risperidone	98 (1%)	3,492 (16.4%)	5%
Olanzapine	88 (1%)	3,089 (14.5%)	9%
Aripiprazole	51 (<1%)	1,677 (7.8%)	15%
Trifluoperazine	22 (<1%)	1,202 (5.7%)	2%

postherpetic neuralgia. For many years, pimozide was considered standard of care for delusions of parasitosis. The recommendations were mainly based on case series and case reports conducted before 2000 and were without official consensus regarding the dose or duration of treatment [2,5-7]. Since 2000, several systematic literature reviews on delusions of parasitosis treatment indicate risperidone and olanzapine as first-line therapy, as these drugs have fewer side effects and similar efficacy [2,8-10]. Despite these recommendations, pimozide prescription trends remained relatively stable. Interestingly, pimozide has also been proposed as potential adjunctive therapy for metastatic melanoma. However, given the lack of data, it is unlikely that this application is driving the pimozide prescriptions observed [11].

Given the critical role that dermatologists play in managing psychodermatologic disorders, it is important they feel equipped to treat these conditions. A 2011 survey found that 31% of dermatologists indicated they use antipsychotics in their practice [3]. Our data suggest that the rate is

much lower and trends have stayed relatively constant over the past eight years. The low rate could be related to dermatologists' lack of comfort and knowledge when prescribing antipsychotics. A 2022 national survey found that 91% of dermatologists expressed discomfort in prescribing antipsychotics and 78% indicated they would benefit from a training course for prescribing antipsychotics [4]. Thus, there may be an opportunity to increase the rate by increasing confidence through education.

In this study we examine population-wide prescription trends for antipsychotics in dermatology. Our analysis is limited to Medicare's utilization and payment data, which does not report the indication of the medication. The database may underestimate prescription rates, as disorders such as delusions of parasitosis tend to present in middle-aged adults who are not generally covered by Medicare.

Potential conflicts of interest

Authors declare no conflicts of interest.

References

- Gupta MA, Vujcic B, Pur DR, Gupta AK. Use of antipsychotic drugs in dermatology. *Clin Dermatol*. 2018;36:765-73. [PMID: 30446201].
- Campbell EH, Elston DM, Hawthorne JD, Beckert DR. Diagnosis and management of delusional parasitosis. *J Am Acad Dermatol*. 2019;80:1428-34. [PMID: 30543832].
- Gee SN, Zakhary L, Keuthen N, Kroshinsky D, Kimball AB. A survey assessment of the recognition and treatment of psychocutaneous disorders in the outpatient dermatology setting: how prepared are we? *J Am Acad Dermatol*. 2013;68:47-52. [PMID: 22954748].
- Li L, Fisher R, Wali G, Firouzabadi LI. Prescribing antipsychotics in dermatology: a national survey of clinical experience, physician confidence and training needs. *Br J Dermatol*. 2022;187:221.
- Lorenzo CR, Koo J. Pimozide in dermatologic practice: a comprehensive review. *Am J Clin Dermatol*. 2004;5:339-49. [PMID: 15554735].
- Hamann K, Avnstorp C. Delusions of infestation treated by pimozide: a double-blind crossover clinical study. *Acta Derm Venereol*. 1982;62:55-58. [PMID: 6175138].
- Trabert W. 100 years of delusional parasitosis. Meta-analysis of 1,223 case reports. *Psychopathology*. 1995;28:238-46. [PMID: 8559947].
- Leucht S, Corves C, Arbter D, et al. Second-generation versus first-generation antipsychotic drugs for schizophrenia: a meta-analysis. *Lancet*. 2009;373:31-41. [PMID: 19058842].
- Ahmed A, Affleck AG, Angus J, et al. British Association of Dermatologists guidelines for the management of adults with

delusional infestation. *Br J Dermatol.* 2022;187:472–80. [PMID: 35582951].

10. Brownstone N, Koo J. The Koo-Brownstone staging system as a tool to assist in the management of patients with a possible

diagnosis of dermatological delusions: an experts suggestion. *J Dermatol Treat.* 2022;33:3199–201. [PMID: 35950783].

11. Taub RN, Baker MA. Treatment of metastatic malignant melanoma with pimozide. *Lancet.* 1979;1:605. [PMID: 85182].