Off-Label Drug Uses

Pimozide: Parasitosis (Delusional)

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This *Hospital Pharmacy* feature is extracted from *Off-Label Drug Facts*, a publication available from Wolters Kluwer Health. *Off-Label Drug Facts* is a practitioner-oriented resource for information about specific drug uses that are unapproved by the US Food and Drug Administration. This new guide to the literature enables the health care professional or clinician to quickly identify published studies on off-label uses and determine if a specific use is rational in a patient care scenario. References direct the reader to the full literature for more comprehensive information before patient care decisions are made. Direct questions or comments regarding *Off-Label Drug Uses* to jgeneral@ku.edu.

BACKGROUND

Delusional parasitosis or infestation is an uncommon disorder in which patients believe they are infested with pathogens (eg, insects, parasites, or vermin) accompanied by abnormal skin sensations (eg, crawling, tingling).^{1,2} Symptoms are persistent and often cause the patient to seek medical attention from a variety of physicians before diagnosis is established. Delusional parasitosis occurs more frequently in women than in men, with a typical onset in middle age. It may be chronic or episodic and has been classified as primary or secondary (eg, drug or disease induced). Various treatment modalities have been recommended, including psychotherapy and pharmacological agents. In various pharmacological therapy overviews, the use of antipsychotics with or without antidepressants has been recognized as primary therapy in addition to treatment of any underlying disease.

PATIENT POPULATION

Adult patients with delusional parasitosis.

DOSAGE AND DURATION

Initial doses of 1 to 2 mg daily are titrated slowly (1 mg every 5 to 7 days) to the effective dose that is best tolerated. Typical maintenance doses are between 2 and 4 mg daily. The lowest possible dose of pimozide should be used for the shortest duration, with periodic assessment to determine tolerance and

response. Duration documented in the literature has been from a few months to over a year.

RESULTS

A lack of well-controlled trials may be attributed to the difficulty in collecting patients with parasitosis, as this is not a common disorder. Pimozide for the treatment of delusional parasitosis is based primarily on data from case series/reports that demonstrate some efficacy in the majority of patients. The use of the drug is limited by its side-effect profile.

Controlled Trials

In a double-blind, placebo-controlled, crossover trial, 11 patients (mean age, 65.6 years; range, 45–83 years) with delusional parasitosis were treated with pimozide (1–5 mg daily) or placebo for 6 weeks separated by a 4-week washout period. The initial pimozide dose was 2 mg daily and was adjusted at 2 weeks based upon efficacy and tolerance. Two patients did not complete the study. All patients were evaluated at baseline and weekly intervals for subjective (eg, itch, feeling of vermin) and objective symptoms (eg, excoriations and delusions). Pimozide was significantly better than placebo in relieving itch delusions, but it was no different than placebo for feelings of vermin or excoriations. In addition, when compared to placebo, pimozide significantly decreased the Brief Psychiatric Rating Scale score from baseline to end of treatment (mean

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reduction, 13.5 vs 1.3; $P = .012$). This study was limited by poor methodology description and small sample size.³

Case Series/Reports

In a case series of 33 patients with delusional parasitosis (median age, 60 years), pimozide was prescribed for 24 patients, 18 of whom took the drug. The dose ranged from 1 to 5 mg daily. No information regarding initial dosing was specified, although the dose was continued for 6 weeks prior to tapering. Of those patients receiving pimozide, 61% (11/18) experienced improvement in or full remission of symptoms; the remaining 39% (7) experienced no change in symptoms. Onset in symptom improvement was noted within 3 to 4 weeks in responders. For those patients not receiving pimozide, only 20% (3/15) experienced relief or resolution of symptoms. This report was limited by poor description of other treatments, lack of specific methodology, and small sample size.⁴

In several case reports, pimozide has been effective in partially or completely resolving symptoms in the majority of adult patients treated for delusional parasitosis. Daily doses in these reports have ranged from 1 to 5 mg in most cases, but they have been as high as 8 mg, with various adjustment schedules based on tolerance and efficacy. In responders, onset of symptom relief has occurred in 10 days to 4 weeks.⁵⁻¹⁴

SAFETY

This is a limited safety profile. Refer to package labeling for complete prescribing information (eg, Warnings/Precautions, Adverse Reactions, Drug Interactions).

Adverse effects that have occurred in the reviewed data include extrapyramidal symptoms and QT prolongation.^{5,7,10}

THERAPY CONSIDERATIONS

Pimozide for the treatment of delusional parasitosis is based primarily on data from case series/reports that demonstrate some efficacy in the major-

ity of patients. The use of the drug is limited by its side-effect profile.

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