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Letter

Adherence to Adalimumab in Patients with Moderate to Severe Psoriasis

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Abstract

Background

The chronic and relapsing course of psoriasis is often associated with poor adherence to treatment. Adherence to topical treatment is abysmal. Adherence to systemic treatments also decreases over time, with an overall adherence rate of 67% for injectable biologic medications. Whereas overall trends in poor adherence have been documented, the fine details of adherence in individual patients is not well characterized.

Purpose

To assess adherence to adalimumab in patients with moderate to severe psoriasis.

Methods

Data on adherence were obtained from a 1-year open label trial including seven patients with moderate to severe psoriasis who agreed to participate in a randomized trial of standard physician education materials plus extended nurse education versus standard physician education materials alone. Adherence to treatment was recorded with electronic monitoring via Medication Event Monitoring System (MEMS) caps undisclosed to the patients. Patients were also instructed to note the time and date they used treatment in a journal.

Results

The subjects exhibited a broad range of adherence behaviors.

Conclusions

Adherence to adalimumab therapy for moderate-to-severe psoriasis is variable and can be very poor. The clinical impact of poor adherence to injectable biologic medications is not yet well characterized.

Keywords: depression, pruritus, insomnia, sleep, sleep quality, psoriasis



Figure 1. MEMs bottle

Introduction

The chronic and relapsing course of psoriasis lends itself to poor adherence to treatment. Adherence to topical treatment is abysmal. Adherence to systemic treatments also decreases over time, with an overall adherence rate of 67% for injectable biologic medications.[1] Whereas the overall trend in adherence to all psoriasis treatments is poor [2, 3, 4], the fine details of adherence behavior in individual patients on self-administered biologic treatment for psoriasis are not well characterized. We assessed adherence to adalimumab in patients with moderate to severe psoriasis to better understand this adherence behavior and to serve as a pilot study for a nurse education adherence intervention.

Methods

Data on adherence were obtained from a 1-year open label trial including seven patients with moderate to severe psoriasis who agreed to participate. The comparison involved a randomized trial of standard physician education materials plus an extended nurse education program versus standard physician education materials alone. Adherence to treatment was recorded with electronic monitoring via Medication Event Monitoring System caps mounted on hazardous waste needle disposal containers (Figure 1). Patients were instructed to note the time and date they used treatment in a journal and they were not told about the electronic monitoring until the end of the study. One patient was lost to follow up for unknown reasons after approximately 190 days. Another patient did not maintain a treatment journal for the last four months of the study. The Wake Forest University School of Medicine Institutional Review Board approved the study.

Results

The subjects exhibited a broad range of adherence behaviors. Adalimumab was given according to standard labeled dosing, with the first dose given on day 1, the second dose to be administered 7 days later and subsequent doses to be administered every 14 days. For the group receiving standard physician education materials (Group A), the average number of days between doses was 19.8 days (SD 3.7 days), whereas the group receiving standard physician education materials in addition to extended nurse education (Group B) was 20.7 days (SD 12.3 days). Excluding the second dose, the number of days between doses varied from 6 to 93 (Figure 2). Patients took an average of 18.7 doses (SD 6.5) out of a recommended average (based on length of enrollment) 24.3 doses (SD 4.7). The mean number of days between doses, as reported by patients, was 17.1 days (SD 7.4 days) for Group A and 14.5 days (SD 3.2 days) for Group B.

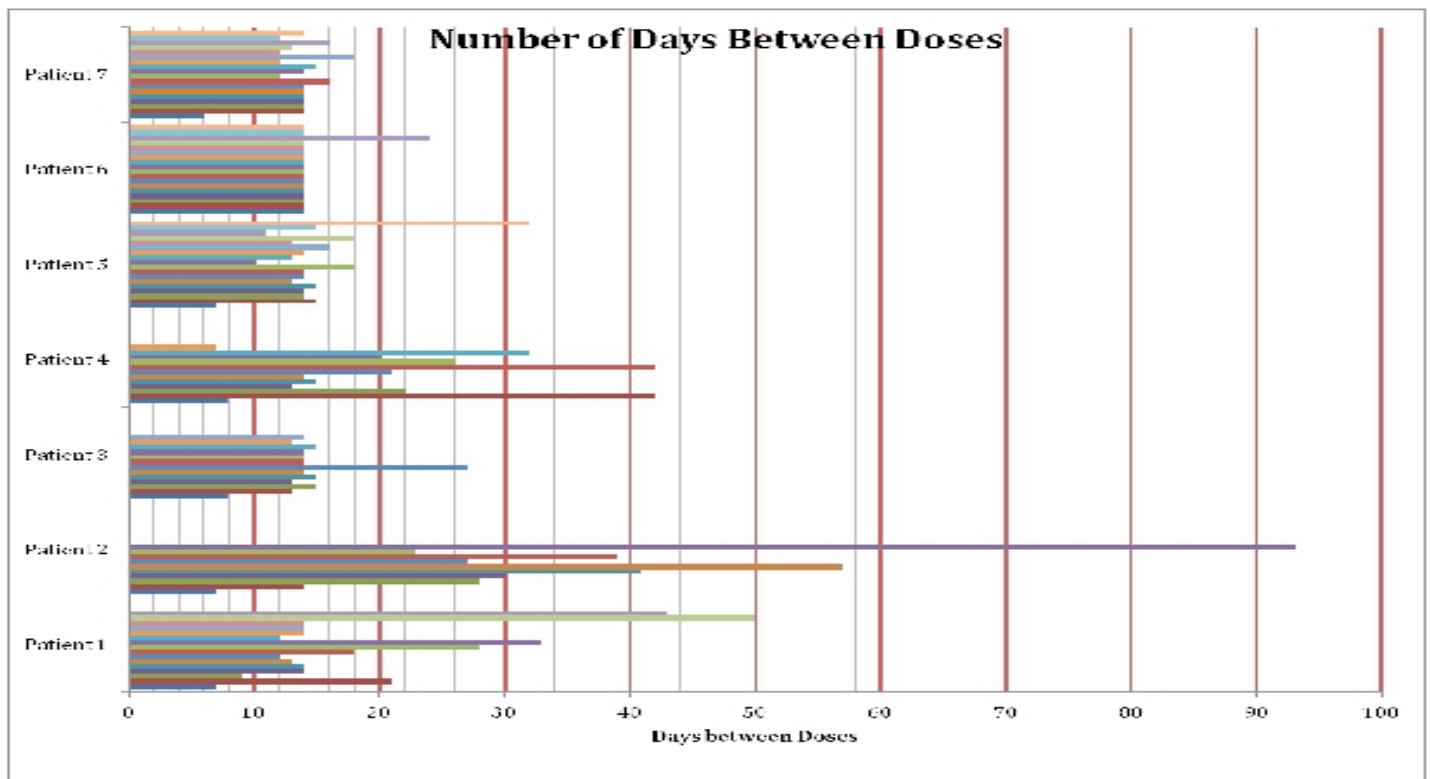


Figure 2. Graphic representation of the number of days between each dose of adalimumab, beginning with the second dose for each patient.

Discussion

Despite the impact of psoriasis on patients' quality of life, adherence to self-administered injectable biologic therapy for moderate-to-severe psoriasis is variable and can be poor. The clinical impact of poor adherence to injectable biologic medications is not yet well characterized. As a pilot study for the impact of extended nursing education on patient adherence, the current study demonstrates that patients display a wide range of adherence behaviors and establishes a mean and variance. These may be used to power future studies in order to further explore the impact of educational interventions on patient adherence to adalimumab.

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