2018

Treatment Options for Hidradenitis Suppurativa: Efficacy, Risks, Benefits

Katherine A. Hennager
University of North Dakota

Follow this and additional works at: https://commons.und.edu/pas-grad-posters

Part of the Skin and Connective Tissue Diseases Commons

Recommended Citation
https://commons.und.edu/pas-grad-posters/12

This Poster is brought to you for free and open access by the Department of Physician Studies at UND Scholarly Commons. It has been accepted for inclusion in Physician Assistant Scholarly Project Posters by an authorized administrator of UND Scholarly Commons. For more information, please contact zeinebyousif@library.und.edu.
Applicability to Clinical Practice

The current guidelines found on DynaMed Plus do recommend adalimumab for moderate-to-severe hidradenitis suppurativa, which is supported by my research. These guidelines from DynaMed are very applicable to clinic use, but there is no cure and treatment is long for the duration of the trial and error. Hidradenitis suppurativa is difficult to treat and should not be treated in a primary care setting, this should be maintained by the dermatology department. There are several different scoring systems used to assess hidradenitis suppurativa and dermatologists are better suited to track these scores to assess how treatment is going. Some lifestyle modifications such as smoking cessation, good control of blood sugars with diabetic patients, and weight loss can be encouraged in a primary care setting.

References


Acknowledgements

I would like to acknowledge my advisor Professor Julie Solomons who has given me throughout the UND PA Program. I would also like to thank Dr. Angela Aalthus and Professor Marilyn Klug for their help with my scholarly project.

Katherine Henninger PA-S
Department of Physician Assistant Studies, University of North Dakota School of Medicine & Health Sciences
Grand Forks, ND  58202-9037

Treatment Options for Hidradenitis Suppurativa: Efficacy, Risks, Benefits

Abstract

Hidradenitis suppurativa is a chronic, recurrent follicular occlusion disease with painful, sometimes debilitating, cutaneous draining lesions and subcutaneous abscesses. A TNF-α inhibitor which belongs to the biologic DMARDS drug class. Kimball et al. (2012) found that at week 16 of their trial 3.9% of the placebo patients (2 of 51), 9.6% of the ECOW patients (5 of 52) and 17.6% of weekly patients (9 of 51) achieved clinical response. Kimball et al. (2012) also found that serious adverse effects rates were 3.9% for placebo, 5.6% for ECOW, and 7.8% for the weekly patients. In period I of each study there were significantly more patients in the adalimumab group than the placebo group that met the primary efficacy endpoint of clinical response at week 12 (PIONEER I: 41.8% vs. 26.0%, P=0.003; PIONEER II: 58.9% vs. 27.6%, P<0.001) (Kimball, 2016).

Adalimumab is a TNF-α inhibitor which belongs to the biologic DMARDS drug class. Kimball et al. (2012) found that at week 16 of their trial 3.9% of the placebo patients, 9.6% of every other week (EOW) dosing of adalimumab patients, and 17.6% of every week dosing of adalimumab patients achieved clinical response. Response patient reports on pain and outcomes were significantly greater in the weekly dosed patients vs. placebo group. A study by Miller et al. (2011) showed a significant reduction in Sartorious score after 6 weeks and an almost significant reduction seen after 12 weeks when compared to the placebo group (P=0.004 and -11.3 vs. 5.8, P=0.07). Kimball et al. (2016) showed clinical response rates at week 12 were significantly higher for the groups receiving adalimumab weekly than for the placebo groups: 41.8% versus 22.0% in PIONEER I (P<0.002) and 58.9% versus 27.6% in PIONEER II (P<0.001).

Hidradenitis suppurativa is a chronic, recurrent follicular occlusion disease with painful, sometimes debilitating, cutaneous draining lesions and subcutaneous abscesses. For this project, the efficacy of adalimumab for hidradenitis suppurativa was assessed and whether it is more beneficial than traditional treatments used. Adalimumab is a TNF-α inhibitor which belongs to the biologic DMARDS drug class. Kimball et al. (2012) found that at week 16 of their trial 3.9% of the placebo patients, 9.6% of every other week (EOW) dosing of adalimumab patients, and 17.6% of every week dosing of adalimumab patients achieved clinical response. Response patient reports on pain and outcomes were significantly greater in the weekly dosed patients vs. placebo group. A study by Miller et al. (2011) showed a significant reduction in Sartorious score after 6 weeks and an almost significant reduction seen after 12 weeks when compared to the placebo group (P=0.004 and -11.3 vs. 5.8, P=0.07). Kimball et al. (2016) showed clinical response rates at week 12 were significantly higher for the groups receiving adalimumab weekly than for the placebo groups: 41.8% versus 22.0% in PIONEER I (P<0.002) and 58.9% versus 27.6% in PIONEER II (P<0.001). DynaMed Plus, PubMed, and Cochran Library were searched with key words: hidradenitis suppurativa, adalimumab, and treatment.

Introduction

The etiology of hidradenitis suppurativa is not completely understood but it is likely multifactorial with some of the possible contributing factors including: genetics, hormones, and aberrant immune response that causes upregulated cytokines (DynaMed Plus, 2016). Risk factors include family history, smoking, obesity, mechanical friction, and certain medications (DynaMed Plus, 2016). Traditional treatments for this disorder consisted of antibiotics, hormone therapy, retinoids, corticosteroid injections, surgical intervention, pain management, and patient counselling on weight loss and smoking cessation. More recently, the tumor necrosis factor-alpha (TNF-α) inhibitor adalimumab was approved by the Food and Drug Administration (FDA) for treating hidradenitis suppurativa.

Statement of the Problem

There is no cure for hidradenitis suppurativa and although there are many treatment options available, the traditional treatments do not provide adequate relief of symptoms for some patients. Adalimumab, though not a cure, may provide more beneficial treatment then these traditional options alone. This review was needed to evaluate research supporting the efficacy of adalimumab for hidradenitis suppurativa and to compare the risks and benefits of using this medication.

Literature Review

- Kimbal et al. (2012) found that at week 16, 3.9% of the placebo patients (2 of 51), 9.6% of the ECOW patients (5 of 52) and 17.6% of weekly patients (9 of 51) achieved clinical response.
- Kimball et al. (2012) also found that serious adverse effects rates were 3.9% for placebo, 5.6% for ECOW, and 7.8% for the weekly patients.
- In period I of each study there were significantly more patients in the adalimumab group than the placebo group that met the primary efficacy endpoint of clinical response at week 12 (PIONEER I: 41.8% vs. 26.0%, P=0.003; PIONEER II: 58.9% vs. 27.6%, P<0.001) (Kimball, 2016).
- Miller et al. (2011) found a significant reduction of the Sartorious score after 6 weeks and an almost significant reduction after 12 weeks of active treatment when compared to the placebo sup (10.7 vs. 7.5, P=0.024 and -11.3 vs. 5.8, P=0.07).
- Miller et al. (2011) state in their study that although adalimumab was well tolerated, there were more adverse effects seen in the adalimumab group than the placebo group with regard to mild infections. However, the difference was only almost significant (P=0.16 and P=0.79, respectively) (Miller, 2011, p.305). All other adverse effects were not significant in the adalimumab group when compared to the placebo group.

Research Question

- In patients with hidradenitis suppurativa is adalimumab more effective than traditional treatments to include antibiotics, hormone therapy, retinoids, corticosteroid injections, surgical intervention, and pain management in treatment outcomes?
- In patients with hidradenitis suppurativa does adalimumab show better treatment outcomes in patients with severe disease vs mild or moderate disease?
- In patients with hidradenitis suppurativa are the side effect outcomes associated with adalimumab treatment more significant or detrimental than side effect outcomes associated with the traditional treatment options?

Discussion

- The studies used support the use of adalimumab for hidradenitis suppurativa.
- There were no placebo controlled trials found within the last ten years to support the use of any of the traditional treatment options for hidradenitis suppurativa.
- Serious adverse effects rates were higher in patient groups that were assigned adalimumab vs the placebo.
- There is no data comparing adalimumab serious adverse effects vs the serious adverse effects of any of the traditional treatments used.
- Adalimumab has only been assessed for moderate-to-severe hidradenitis suppurativa, therefore the efficacy for adalimumab for mild hidradenitis suppurativa is unknown.