Picking at the Perspectives: An Analysis of the Efficacy of Isotretinoin

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Isotretinoin, or its more well-known name, Accutane, is a type of oral medication that clinically treats acne vulgaris. It was first approved by the FDA for severe acne in 1982.\(^1\) It has not been “superseded by any other [anti-acne] treatment” and remains the most efficacious medication for most patients.\(^2\) Biologically, isotretinoin works because it reduces sebum production and other substances that may cause acne while having anti-inflammatory properties.\(^1\) Along with understanding the biological mechanism of isotretinoin, its social consequences are also important to take note of when considering the efficacy of this treatment. This paper will be investigating the shared and varying perspectives on how isotretinoin’s efficacy should be evaluated. It can be synthesized that patients and medical providers determine isotretinoin works if there is an observed improvement in a patient’s mental wellbeing and a sufficient amount of patient education, respectively. Although there is a disconnect in what is used to measure efficacy, they both agree patients need the ability to endure isotretinoin’s side effects to maximize the benefits.

Acne correlates with a decline in self image and makes one more vulnerable to body dysmorphia, which can be improved by using isotretinoin. Emma Chamberlain, an internet personality, is a prime example of isotretinoin bettering one’s self image. In her podcast *Anything Goes*, Chamberlain discusses her acne journey while being put in the spotlight at a young age. The purpose of this discussion about acne was not to promote isotretinoin, but rather to explain her experience and how she believes isotretinoin was *the* treatment that “was able to fully get rid of [her] acne”.\(^3\) Before being introduced to isotretinoin by her

\(^1\) Mannino, "A short history of Accutane"
\(^2\) Layton, "The use of…", 1
\(^3\) Chamberlain, "Acne", 57:41
dermatologist, Chamberlain’s mental health and self esteem were both at a low. She “felt so bad about how [her] face looked” since she had to “be on camera every single day...and could barely look at [herself] in the mirror because of [her] face”. It is evident the amount of distress Chamberlain’s dermatological issues caused and as it led to self body-image issues which interfered with her work life. She explicitly says that she had “hit rock bottom”. After being on isotretinoin for 7 months, she states that she had “never seen [her skin] that perfect..[and] all the trial and effort.. led to taking Accutane...and the skin [she] dreamed of and it was amazing”. The implementation of isotretinoin led to Chamberlain having physically clearer skin, which isotretinoin was prescribed to do, as well as reaching an improved mental state, describing it as her “dream” and how it felt “amazing”. It can be concluded that the improvement of a patient’s mental wellbeing can be used to measure efficacy of isotretinoin in terms of patients.

On the other hand, medical professionals believe the efficacy of isotretinoin increases with patient education. In “Optimizing isotretinoin Treatment”, Steven Leon, a physician assistant, discusses the skills and knowledge required to improve both patient adherence and comfort when taking isotretinoin. This includes providing the logistics of how to properly take isotretinoin, its history, and the controversial reputation it has. The article’s main purpose is to provide “all the tools and knowledge to guide the patient through a successful treatment”. Patient education is highly emphasized and is especially important with isotretinoin since it is “a unique drug and completely different than any

4 Chamberlain, "Acne", 41:39
6 Chamberlain, "Acne", 54:01
7 Leon,”Optimal isotretinoin Treatment”, 1
other acne medication”. Essentially, medical providers like Leon believe the efficacy of isotretinoin increases when patients are well informed before being prescribed as it creates familiarity with the intervention and ensures proper use.

Compared to Chamberlain’s podcast, there is a disconnect between how patients and medical professionals measure and determine the efficacy of isotretinoin. Chamberlain uses the progression of self-image as proof isotretinoin works while Leon emphasizes patient education as the main determinant for isotretinoin’s efficacy. Leon is a physician assistant and published their article on a dermatology website, Practical Dermatology, which could potentially justify the lack of mental health discussion since their main purpose is to “enhance quality of care and improve ...dermatology practices”. Chamberlain, on the other hand, is both a patient and online influencer, who posts online for entertainment purposes. Her podcast focuses more on the patient experience and mental wellbeing. The only time Leon brings up mental health is in the last section: “a rewarding experience.” Leon closes with his overall consensus of isotretinoin: while recognizing the risks of isotretinoin usage, it will dramatically improve “patients’ acne and [reduce] frustration and problems”. It is evident that there is only partial recognition of mental health playing a role in acne and isotretinoin as it is not the main focus of the article. This brings up the discussion of what factors should be used to measure efficacy of an intervention. Should it be based on the patient’s experiences and symptoms, how “well” the patient manages and utilizes the intervention, or a standardized scale that measures the visibility of inflammation and skin lesions? Similarly in Bahara Jayram Venkat’s “Cures”, the

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8 Practical Dermatology, “About”
9 Leon, “Optimal isotretinoin Treatment”, 6
essay investigates what it means for an illness to be “cured” through the bacteriologist Robert Koch’s self-proclaimed discovery of the cure of tuberculosis in guinea pigs. When individuals were injected with this cure, they experienced side effects like fevers, vomiting, and inflammation, but nonetheless “were now regarded as practically cured” from tuberculosis. There is a disregard of the side effects and a focus on whether these patients had tuberculosis after the inoculation of the cure. This raised many “ethical, and practical questions about the nature of cures and the proper means of proving their efficacy” and whether side effects should be taken into account into the overall assessment of an intervention’s efficacy. Likewise, the lack of a standardized measurement for the efficacy of isotretinoin led to its controversial reputation due to its inevitable side effects and everyone’s different indicators on whether isotretinoin works.

Just like with Koch’s cure, with isotretinoin, both Chamberlain, a patient, and Leon, a medical provider, say it overall “works” regardless of the side effects. There is an agreement amongst the two perspectives that although there are drawbacks to using isotretinoin, the benefits outweigh them. Both sources state how isotretinoin is efficacious when patients can tolerate these said side effects. In Chamberlain’s podcast, she recalls a decline in mental health and joint mobility while an increase in back pain, fatigue and dryness. Nevertheless, she emphasizes how it was “all worth it” in the end and it is necessary to be “open to the process”. Chamberlain claims here that one must be mentally strong to endure the obstacles that come along with using isotretinoin for it to work, as the benefits outweigh the drawbacks. Leon also acknowledges these consequences as he

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10 Venkat, “Cures”, 481
11 Venkat, “Cures”, 476
12 Chamberlain, “Acne”, 52:20
dedicates sections in the article to elaborate on the potential birth defects and isotretinoin’s controversial reputation as it can cause depression.\textsuperscript{13} Regardless of these drawbacks, he is firm believer that all of the benefits like clear skin and a reduction in frustration will “make it well worth the extra effort”.\textsuperscript{9} There is a general consensus from both patients and caregivers that using isotretinoin will be “worth it” in the end.

While isotretinoin is still used for its primary intended purpose of clearing severe acne, it is also utilized to improve one’s mental wellbeing, specifically self-image, which can be done through sufficient education and endurance from the patient. Patient and medical providers weigh these efficacy determinants varyingly. There is a greater emphasis on using mental wellness as the indicator of isotretinoin’s efficacy from users like Chamberlain while medical professionals rely more on adequate patient education. As there is no universal standard on measuring efficacy, taking account of all perspectives, experiences, and opinions will allow for a more holistic judgment and open-ended assessment of isotretinoin.

\textsuperscript{13} Leon, “Optimal isotretinoin Treatment”, 2
Works Cited


