

Triamcinolone with Vitamin D Synergistic Efficacy in Psoriasis

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Background:

- Psoriasis is one of the most common skin conditions in the United States affecting more than 8 million people.
- High amounts of vitamin D has been shown to be effective in treatment of psoriasis. It also has a well-documented safety profile at the doses and duration that will be used during this study.
- Triamcinolone and other topical corticosteroids are considered a first line treatment for mild to moderate psoriasis with a well-documented safety profile.
- Individually both of these medications have shown effectiveness in the management and treatment of mild to moderate psoriasis.
- This study is designed to test whether a combination therapy of topical 0.1% triamcinolone with 40,000 IU vitamin D3 daily is effective in treating mild to moderate psoriasis.

Methods:

- To test this, we planned to enroll up to 24 subjects whom are age 18 and older with mild to moderate psoriasis (2%+ PASI).
- Currently, we have 7 subjects enrolled. These subjects will be treated with topical 0.1% triamcinolone and oral 40,000 IU vitamin D3.
- The patients were monitored monthly until completion of trial at 6 months.
- During the 6-month period, patients had monthly blood draws (CBC, CMP, iPTH, 25-hydroxyvitamin D, 1,25-dihydroxyvitamin D), PASI scores (self-calculated), sPGA (self-calculated), Quality of Life assessment (DLQI), PHQ-9, vital signs, height and weight.

Results:

- Preliminary analysis of 5 subjects showed a consistent decrease of PASI score from initial screening appointment (average score of 6.42) to final appointment on week 24 (average score of 4.72).
- There was a modest decrease in sPGA for all subjects with an average starting sPGA of 2.6 and an average final sPGA of 2.
- There was a modest improvement in PHQ9 for all patients with a starting average score of 6 and a final average score of 3. Further, there was a mild improvement in DLQI score with a starting average score of 3 and a final average score of 2.25.
- From a lab value perspective, there were no patients with recorded hypercalcemia or other recorded electrolyte or metabolic derangements throughout the duration of the study. (average Calcium: 9.5).
- There was a moderate average increase in 25-hydroxyvitamin D levels (starting average value: 24, final average value: 68). Finally, there was a modest decrease in average iPTH with an average starting value of 50.6 and an average final value of 23.

Patient	PASI Start	PASI Finish	sPGA Start	sPGA Finish
1	12.8	5.8	3	3
2	4	1.6	2	1
3	7.5	4.6	3	2
4	3.6	4.4	3	2
5	4.2	7.2	2	2
Average	6.42	4.72	2.6	2

Conclusions:

- Vitamin D combined with triamcinolone showed a decrease in PASI and SGA in several patients with psoriasis.
- While preliminary results are encouraging, more subjects are needed to make definitive conclusions on the efficaciousness of vitamin D combined with triamcinolone in patients with mild to moderate psoriasis.

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