

## CASE REPORT

# Reduction of Psoriasis in a Patient under Network Spinal Analysis Care: A Case Report

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**Abstract** — This case report describes the progress of a 52 year old male with chronic psoriasis, first diagnosed in April of 1992. After the condition exacerbated over a five year period, he was placed on 12.5 mg/week methotrexate, and oral immunosuppressant medication in October of 1997. After commencing the medication, the condition reduced from 6% body coverage, with flares of 15-20%, to a body coverage of 5%. Following a cessation of the oral medication in February, 1998, the condition recurred at the previous uncontrolled level within one month. The patient was again placed on 12.5 mg/week methotrexate, and subsequently the condition reduced to 5% body coverage. The patient's dose was reduced to 10 mg/week, and later to 7.5 mg/week, with the psoriasis remaining at 5% coverage. On 5/18/98, the patient commenced regular NSA care. He reported a reduction in the psoriasis condition on 6/3/98, and was taken off the oral medication on 6/25/98. The reduction continued, and the patient was advised by his medical physician on 7/01/98 to continue the cessation of oral medication. As of 9/30/98 the psoriasis had decreased to 0.5% to 1.0 % of coverage, and prior plans to initiate ultraviolet-A therapy were canceled. As of 11/98, a five month period since cessation of methotrexate, the patient has remained under regular NSA care, with no recurrence of psoriasis body coverage greater than 1%, the only medication being a topical ointment. This is contrasted to the recurrence after one month, following the patient's first cessation of methotrexate, and prior to NSA care. The possible role of NSA care in the reduction of the patient's psoriasis, and other health benefits is discussed.

*Key words:* Network spinal analysis, NSA, psoriasis, methotrexate, plaques, vertebral subluxation, chiropractic.

### Introduction

The present report describes a 52 year old male Caucasian diagnosed with psoriasis. Prior to Network Spinal Analysis care, the patient experienced a reduction of psoriasis under medical care, with a subsequent exacerbation one month after he ceased taking medication. After commencing NSA care, which is a system of spinal health care delivery within the subluxation based chiropractic model, subsequent reduction of the condition occurred concomitant with the patient's second cessation of medication.

NSA, which is currently estimated to have over 12,000 recipients of care worldwide, is not purported to be palliative or a cure for medical conditions. However, the purpose of this case report is to contribute to other reports which link NSA care to discernible physiological changes associated with the care received.<sup>1,2</sup> Relative to this perspective, psoriasis is thought to be an auto-immune disease, linked to multiple genes, effecting men and women with equal frequency.<sup>3,4</sup> While research has not

revealed the etiology of this condition, it is believed to be provoked by local trauma, overexposure to the sun, infection, stress and physical illness.<sup>3-5</sup> Psoriasis is characterized as a disorder of the keratinocytes, which are formed in the lower epidermis of the skin. As these psoriasis cells rise to the skin's surface, their normal healthy life span is reduced from 26 days to 3-4 days. This rapid proliferation of keratinocytes is coupled to an aggregation of T lymphocytes, as might occur in an infection, and numerous blood vessels. The highly vascularized accumulation of skin cells, and T lymphocytes results in the physical appearance of scaly, red elevated lesions.<sup>3-5</sup>

Since the condition is often cleared under the influence of immunosuppressant drugs, such as methotrexate,<sup>3,4,6</sup> there is support for the theory that psoriasis is an immune-related disorder. While any area of the body can be effected, psoriasis is frequently found on the scalp, lower back, elbows, knees, groin, genitals, and skin folds. The disease is also characterized by its chronic nature which may go in and out of remission.<sup>3-5</sup>

### Patient Presentation, Relevant History, and NSA Care

The patient who was first introduced to Network Spinal

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Analysis on 5/12/98, presented for Network Spinal Analysis (NSA) care on 5/15/98. The subject complained of general muscle soreness and stiffness, and pain in his neck and mid-back.

He had previously been diagnosed with psoriasis in April of 1992, one month after receiving a beta-blocker for elevated blood pressure. The condition gradually increased in severity from 1% body coverage to 6%, with "flare ups" ranging from 15-20% body coverage, by August 1997. Lesions were predominantly on the legs (shins) and feet.

The patient began methotrexate therapy (12.5 mg/week) in October of 1997, followed by a reduced body coverage to 5%. On 3/3/98, medical evaluation revealed a recurrence ("flare-up") of lower extremity plaques after the patient had mistakenly abstained from taking methotrexate one month prior. Even though the condition was reduced under oral medication, both physician and patient were concerned since methotrexate therapy was reported to cause liver damage, immunosuppression, and a plethora of other potential side effects.<sup>6</sup> However, following recurrence of psoriatic plaques, the patient once again elected to undergo methotrexate therapy (12.5 mg/week).

Medical evaluations on 3/31/98, and 5/5/98, with patient receiving methotrexate (10 mg/week) reported continued resolution of plaques, and clinical laboratory findings accompanying these medical visits indicated the patient was tolerating the medication well. On 6/2/98 dosage of methotrexate was reduced to 7.5 mg/week, as the condition appeared to be controlled at 5% coverage. However, at this time the patient was advised that during the coming winter months, he should expect to undergo ultraviolet-A-therapy along with oral medication. After undergoing a methotrexate taper from October of 1997 through 6/25/98, receiving a total dosage of 414.5 mg, the patient was advised on 6/25/98 by his physician to cease oral medication as the psoriasis had remained at a controlled level since 3/14/98.

### NSA Care

The methods and protocols regarding NSA which were followed with regard to this patient, as well as the objective of NSA in regard to correction of vertebral subluxation, have been described previously, including the indicators of subluxation.<sup>7</sup> Preliminary chiropractic evaluation of the patient on 5/15/98 revealed head in flexion and rotated to the right, elevated left shoulder, with right "foot flare." Prone spinal analysis revealed presence of left short leg, left ankle inversion, left heel tension, bilateral leg adduction resistance, and bilateral leg abduction resistance, and a left cervical syndrome. Prone examination demonstrated the presence of right hip elevation, left shoulder elevation, and visual "tensing" of the upper thoracic area.

Sitting and prone muscle palpation revealed "marked, ropey" bilateral vertical bands in the upper cervical, lower cervical, and upper thoracic regions of the spine. Less "ropey" character of spinal musculature was detected between T4 and L5.

The patient was seen three times per week and re-evaluated at 8 weeks. The patient was seen regularly on Monday, Wednesday, and Thursday mornings at 9:30 a.m. during which time he was administered the appropriate NSA care based on the findings relative to the indicators of subluxation described above.<sup>7</sup>

Based on the initial findings of 5/15/98, in accordance with

NSA protocol,<sup>7</sup> care was initially applied on 5/18/98 by using Level One spinal contacts in a sequence which included: Phase 2 through Phase 1 on the left of the second sacral segment, C2 contact in an inferior to superior direction, followed by Phase 5 through Phase 1 contacts administered bilaterally at the level of the second sacral segment. C5 and coccyx were also contacted to address tension in the upper thoracic area. This pattern of adjustment was modified somewhat from visit to visit depending on the presentation of the patient with regard to indicators of subluxation, as described above, and areas of spinal tension. Overall, the segments which were contacted for adjustment, in a sequence consistent with NSA protocol,<sup>7</sup> were: S2, S3, C2(left), C2 (inferior to superior), C2/coccyx, C3(left), C5/coccyx, C5(left), C5(inferior to superior), and the left occiput.

### Results

#### *Level One Care*

The patient completed 23 visits between 5/18/98 and 7/20/98 (Table 1), during which time he was in Level One of care. Based on the patient's presenting chiropractic examination profile, coupled to his six year history of chronic psoriasis gradually increasing in severity, with no history of non-medicated remissions, informed consent was obtained to report the patient's progress while under NSA care.

#### *Patient Commentary:*

During the time period between 5/18/98 and 7/20/98, under Level One Care,<sup>7</sup> the patient reported the following:

5/18/98 - Mowed lawn over weekend felt great for the first time.

5/20/98 - Patient noted easier to get in and out of his vehicle. Positive changes in spinal musculature tension, and other regions of discomfort.

5/27/98 - Sleeping better than ever. Mowed lawn again with continued ease. Continuation of other changes noted on 5/20/98.

5/29/98 - Same as 5/20/98 and 5/27 with regard to spinal musculature.

6/01/98 - Same as above with regard to spinal musculature.

6/03/98 - Reported notice of reduction of psoriasis. "stiff left side."

6/05/98 - "okay."

6/08/98 - Reported less tension in spinal musculature, more aware of areas of comfort and ease.

6/12/98 - Stiff left side.

6/15/98 - "Much better overall."

6/17/98 - Noted positive changes in spinal posture, tension in spinal musculature, more ease in regions of discomfort, improved respiration, overall increase in flexibility.

6/18/98 - "Doing well." Spouse noticed overall improvement, requested him to continue care.

6/24/98 - Continued improvement.

6/25/98 - Patient discussed health

6/29/98 - Patient reported a general overall flexibility.

7/01/98 - "Good."

7/02/98 - Patient stated Dermatologist took him off methotrexate therapy, with next medical visit scheduled in September, 1998, in the absence of a "flare up." Patient also recommended judicial natural sunlight, with further suggestion for ultraviolet-A therapy consideration in September, 1998. Continues with temovate, a topical ointment.

7/06/98 - "Good."

7/08/98 - "Just plain exhausted."

7/09/98 - "Better" but after driving, discomfort in the neck area.

7/13/98 - "Bad weekend."

7/16/98 - No comments

7/20/98 - Re-evaluation. Patient notes since the beginning of NSA care to date the following observations:

- a. more aware of spine, but not discomfort, especially at work.
- b. aware of spinal tension/restricted movement independent of pain
- c. better posture, more upright and flexible.
- d. movements in general are easier.
- e. feels a sense of "ease" in various areas of his spine.
- f. more aware of where he holds areas of tension in his spine
- g. patient experienced spontaneous movements in remote regions of his spine to where the adjustment was administered.
- h. has experienced a sense of "unwinding" of tension in his spine.
- i. discontinued methotrexate, psoriasis greatly improved notably on his legs, with continued resolution on his feet, high blood pressure dropped. Generally feel much better. Colleagues inform the patient that he is more pleasant to be around.

### Level Two Care

The patient continues care to date, November, 1998. Clinically, he demonstrates considerable reduction of indicators of vertebral subluxation, and exhibits a notable reduction in previous tension in the spinal musculature, and requires less frequent visits. As of 10/28/98 he was in his third month of Level Two Care (Table 1).<sup>7</sup> On 9/30/98, while under Level Two of Care, the patient reported that the psoriasis was resolved on his feet as well as legs (Figure 1). The only medication he has used since withdrawing from methotrexate on 6/25/98, has been temovate, a topical ointment. He was not recommended by his

medical physician for ultraviolet-A phototherapy (PUVA) during his September medical visit, even though he had been exposed to very limited natural sunlight between his 6/01/98 visit and September, 1998. During this same period he reported periods of work stress. However, he continued to experience reduction of psoriasis, with only minimal, less than 1% coverage of early plaques which seem to resolve without further advancement (Figure 1).

### Discussion

While NSA care does not claim to be palliative or a cure for any medical condition, the present study suggests that it may be a factor in the reduction of psoriasis in the care of this patient. It is notable that the patient, prior to NSA care, had an approximate six year history of psoriasis without any non-medicated reduction or remission. Moreover, when the patient, mistakenly ceased his dosage of 12.5 mg/week, within a month the condition was back to its uncontrolled level.

The patient's second cessation of the immunosuppressant medication (7.5 mg/week), following the advise of his physician, occurred at a time when he was stable at 5% coverage, and had also been regularly under Level One of NSA care for 5 weeks. One week later, the psoriasis had reduced to approximately 1% and his medical physician, based on the reduction of the condition advised continued cessation of oral medication. Rather than an expected return of the condition, as with the first cessation of oral medication, the patient as of November, 1998 is currently at 0.5 % to 1.0 % body coverage, with the only medication being applications of a topical ointment. The period since the second cessation of oral medication has been five months, during which time the psoriasis has not exceeded 1% body coverage. The patient has reported that it is a relief to have ceased the oral medication as it has the potential for a wide



**Figure 1. Photograph of Patient displaying the distribution of psoriasis plaques as of November 20th, 1998. Remaining plaques are isolated to the ankle foot areas, which represent approximately a 1% coverage.**

range of serious side effects. The patient also reported that it was surprising to his medical physician that the psoriasis had remitted to such a level in the absence of oral medication.

This author is unaware of any reports in the scientific literature regarding remissions of psoriasis in conjunction with chiropractic care. One study has characterized the incidence of psoriasis patients in a chiropractic clinic in Sweden.<sup>8</sup> The study found among 1500 patients, 98 (6.5%) had been diagnosed with psoriasis, as compared to an incidence in the general population of 2%. Gender distribution was nearly equal, and the average age was 50.7 years, about the same age as the patient reported in this study (52 years). The Swedish patients with psoriasis tended to receive chiropractic "treatments" more than twice as frequently as non-psoriasis patients. Another study correlated psoriatic arthritis with changes in the cervical spine.<sup>9</sup> Two patterns of cervical spine abnormalities were observed; erosive lesions and another similar to ankylosing spondylitis. Moreover, it has been reported that a patient diagnosed with psoriatic arthritis, with extensive ankylosis, responded with increased cervical range of motion after toggle/recoil adjustments to C1, with decreases in clinical symptoms paralleling increased range of motion.<sup>10</sup>

Although the last two studies mentioned above dealt with arthritis conditions likely associated with psoriasis, they provide evidence that the cervical spine and other spinal abnormalities can be associated with psoriasis, and that chiropractic care, notably the adjustment, can be of value.

The present report suggests that in addition to chiropractic benefits which improve range of motion and perhaps pain,

other symptomatic features of psoriasis may abate under the influence of NSA care. Other factors, as well, which affect the patient's quality of life, such as "feeling better," "sleeping better," and being more pleasant to be around, may also reflect NSA care, as it is a model of chiropractic care which is postulated to specifically promote improvement in neurological integrity through relieving adverse mechanical cord tension.<sup>7</sup> Moreover, based on evidence that psoriasis is an auto-immune disease,<sup>4</sup> it may be hypothesized that restoration of the integrity to the nervous system would also enhance normal immune function. This is a plausible concept as the field of psychoneuroimmunology has demonstrated the close link between the nervous system and the immune system.<sup>11-13</sup>

## Conclusion

In conclusion, it appears that some benefit in the reduction of psoriasis, as well as the patient's perception of health improvement, may be associated with regular NSA care. However, since psoriasis is known to exhibit episodes of remission, it cannot be overlooked that NSA care may have been coincidental to the remission. In order to be properly evaluated, this possibility will require more thorough investigation. Moreover, in consideration of the potential dangers of the standard drug therapy available to patients with this condition, it is suggested that a clinical trial in a population of psoriatic patients would be appropriate to evaluate the possible benefits of NSA care separate from other forms of care, or administered concurrently.

**Table 1.** Relationship Between Medication Tapering, NSA Care, and Status of Psoriasis in the Patient. \*

Date(s)	Medication (mg/wk)	Dose	Level of NSA Care	Psoriasis Status
4/92 -8/97	Tazorac	ointment as needed	-	1% -6% body coverage (Flares = 15 - 20%)
10/97	Methotrexate	12.5	-	Reduced to 5%
2/98-3/3/98		Mistaken cessation	-	Flares = 5%-20%
3/4/98	Methotrexate	12.5	-	Reduced to 5%
3/31/98	Methotrexate	10.0	-	Reduced to 5%
5/5/98	Methotrexate	10.0	-	Quo
5/18/98	Methotrexate	10.0	Level One	Quo
6/01/98	Methotrexate	10.0	Level One	Quo
6/02/98	Methotrexate	7.5	Level One	Quo
6/25/98	Medically advised cessation	-	Level One	Reduced to 1.0%
7/01/98	-	-	Level One	Reduced to 1.0%
7/02/98	-	-	Level One	Reduced to 0.5 - 1.0%
7/20/98				
7/28/98	-	-	Level Two	Quo
9/30/98	-	-	Level Two	Quo
9/30/98	No further medical therapy, only topical ointment Temovate	-	Level Two	Quo
10/28/92	-	-	Level Two	Quo

\* See Patient Presentation, Relevant History, and NSA Care

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