**Effective Treatment of Nickel Allergy Using a Low Dose, Oral Homeopathic Medication Consisting of Nickel Sulfate in an Open-Label Retrospective, Cohort Study.**

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Introduction

Nickel dermatitis is one of the most common causes of allergic contact dermatitis (ACD) in the world, constituting more cases of ACD than do dermatitis’s from all other metals combined. The North American Contact Dermatitis Group, a multicenter collaborative research patch-test group in the United States and Canada, found that of 5,800 patients who were patch-tested from 1998 to 2000, 16.2% had positive reactions to nickel.(1)

The metal is ubiquitous in our society as it is present in common objects such as jewelry, coins, spectacle frames, and zippers. Occupational sources of nickel exposure include nickel plating, alkaline batteries, insecticides, fuel additives, dyes, and pigments. (2)

The incidence of ACD caused by nickel dermatitis is likely underreported, and once ACD is acquired, allergic sensitivity persists indefinitely. Nickel dermatitis is two to six times more common in women than in men.(3) and is more common in younger individuals, noncontact patients, and patients with hand nickel allergy.(4,5)

It appears that ear piercing may increase the incidence of the disorder. Five hundred twenty Swedish men in compulsory military service were patch-tested with nickel and cobalt (which commonly co-reacts with nickel and is found in many similar environmental sources). Among those with pierced ears, 7.9% had positive reactions; in those without pierced ears, 2.7% had positive results (p <.05).(6)

In Germany, failed arthroplasty due to peri-implant inflammation was found to reflect an allergic hyperreactivity because the patients concomitantly had a metal allergy. They concluded that allergic reactions should be suspected in failed metal-on-metal joint surgery.(7) The same can be said of dental appliances.(8)

Oral nickel intake has been postulated as a method of preventing sensitization from cutaneous nickel exposure through immune tolerance induction. (9) In addition, the use of oral nickel after sensitization occurs is a theory that has some documentation. Some postulate that the oral nickel pushes T cells to manifest suppressor activity and perhaps desensitize patients. (10) Others have found that desensitization occurs via oral nickel intake by decreasing both the nickel-specific proliferations and the numbers of nickel-responding T cells in peripheral blood.(11)

In a French study, fifty-one patients presenting a dermatological allergy to nickel were treated over 3 years with small oral doses of nickel sulfate per day. Among the 30 cases that went through the whole follow-up, symptomatology totally disappeared in 29 cases, and a partial alleviation was achieved in 1 case after 1 year of treatment.(12)

In two controlled Swedish studies, each including 24 patients with contact allergy to nickel, different protocols were designed in an attempt to diminish the patients' hypersensitivity by oral administration of the antigen. With doses of 5.0 mg nickel sulfate taken once a week for 6 weeks, but not with 0.5 mg daily, the degree of contact allergy was significantly lowered, measured as patch test reactions before and after nickel administration.(13)

The present study is an attempt to substantiate the effect of oral nickel on this type of contact dermatitis. Here, the use of a commercially available product, Psorizide Forte® [Plymouth Pharmaceuticals, Inc. PO Box 702418, Tulsa, OK 74170] is utilized. This medication is a biochemical homeopathic medication indicated for the treatment of psoriasis, dyshidrotic hand / foot eczema and nickel allergy. Each Psorizide Forte® table consists of oral nickel in the form of nickel sulfate [1X].

In order to test the empiric data in the treatment of nickel allergy with Psorizide Forte® a total of 59 patients with nickel allergy were studied in an open-label retrospective, cohort study examining the efficacy of this low-dose, homeopathic mineral therapy.

Material and Methods

Fifty-nine patients presenting a dermatological allergy (erythema, urticaria, angioedema, and contact dermatitis) to nickel were treated over 3 years with oral doses of 1.0 mg nickel per day. Diagnostic tests comprised patch and oral provocation tests.

Results

We screened 477 consecutive dermatologic patient records, out of which 59 (12.3%) were found to be affected by nickel allergy. Ages ranged from one year to 57 years. Female male to ratio was 8.02:1.

In 7 cases, the treatment was interrupted because of symptom reactivation, and in 41 cases for other reasons. Among the 11 cases that went through the whole follow-up, symptomatology totally disappeared in all cases. Oral provocation tests with these 11 patients showed an overall increase of tolerance. Patch tests were negative in all 11. Although the study was not conducted prospectively, the results of this attempt to cure nickel allergy are statistically significant.

Discussion

Nickel contact allergy has been widely studied. (14-26) Several studies have evaluated nickel allergy in the general population. One such study of 2,500 females in a Danish general population found nickel sensitivity in 14.5% of that population;(15) an evaluation of 1,546 Danish female twins reported a prevalence of 9.6%.(16) In two studies of nickel allergy in the general population, 0.8%(17) to 0.9%(18) of men were patch test positive whereas 8.0% and 9.0% of women were patch test positive (980 and 1,159 subjects, respectively).

Prevalence rates of nickel allergy are higher in patch-test populations. The percentage of patch-tested, patients that reacted to nickel ranged from 4.5% among 2,285 Japanese patients(14) to 16% of 1,312 Scottish patients. (19) When the data are analyzed by gender, nickel caused positive reactions in 1.8% of men in a European report(20) and in 11% of 453 patients in a Nigerian analysis. (21) For women, the reports ranged from 4.3% in Japan to 26% in Scotland. More recent reports on the rate of positive patch-test results include 17.7% of 5,557 patients from Singapore, (22) 13.1% of 1,141 patients from Germany, (23) 13.8% of 12,058 patients from the Czech Republic, (24) and 17.3% of 10,511 patients from a group of nine European countries. (25) A meta-analysis of 15 years of published data on the T.R.U.E. Test system of patch testing (Mekos Laboratories A/S, Hillerød, Denmark) found that 14.7% of 3,598 patch-tested patients were nickel sensitive. (26)

By contrast, studies to actually desensitize these patients have been sparse. The senior author has had extensive experience with nickel desensitization over the past several years. Presented are results from only a part of this. Further studies are pending.

Our data supports the high incidence of this problem and the predomination in the female population. It also agrees with the European studies showing a high likelihood of desensitization using oral nickel. Even in a retrospective approach the results are pretty convincing.

This problem is huge and this review shows that a low dose, oral homeopathic medication consisting of nickel sulfate, that is easily available, can dramatically improve nickel allergy in a statistically significant manner. The major advantages of using this preparation is the safety, lack of side-effects and contraindications and a very high likelihood of success. Clinicians should take advantage of an easy answer to a common and growing problem.

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