

CASE REPORT

Fiddler's Neck Accompanied by Allergic Contact Dermatitis to Nickel in a Viola Player

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"Fiddler's neck" is an irritant contact dermatitis that frequently affects violin and viola players. The etiology of the skin changes associated with this condition are probably attributable to a combination of factors—including increased pressure, friction, poor hygiene, and excessive perspiration. Clinically, the lesions generally consist of a localized area of lichenification on the left side of the neck just below the angle of the jaw. Herein, we report a case of fiddler's neck in a viola player, attended by allergic contact dermatitis to the nickel in the metal fixtures of a viola. We hope that our case report draws the attention of dermatologists toward this, and many other skin problems that affect musicians. (*Ann Dermatol* 22(1) 88~90, 2010)

-Keywords-

Allergic contact dermatitis, Fiddler's neck, Viola player

INTRODUCTION

"Fiddler's neck" is an irritant contact dermatitis that predominantly affects violin and viola players. It presents, typically, as a focal lichenification and pigmentation on the left side of the neck just below the angle of the jaw¹⁻³. The etiology of these skin changes probably involves a combination of factors, including increased pressure, friction, poor hygiene, and excessive perspiration¹⁻⁶. Recently, we experienced a case of typical fiddler's neck in a viola player, which was accompanied by allergic contact dermatitis to the nickel in the metal fixtures of the

viola.

CASE REPORT

A 21-year-old female presented with a hyperpigmented lichenified plaque on her neck just below the angle of her left mandible and erythematous scaly plaques on her left lower neck, where the skin rubbed against a metal fixture on the instrument (Fig. 1). She had been playing viola since she was 13 years old and the lesions had developed 4 and 7 years later, respectively. The patient had her ears pierced when she was 17 years old. Since that time, she has suffered from intermittent mild eczema on the earlobes around the piercing site. Because of the typical history and clinical findings, including the site of the lesion, the former lesion was diagnosed as fiddler's neck. To diagnose the latter lesion, we conducted a patch test with a Korean standard series, and a positive reaction to nickel sulfate was detected on the D2 and D4 readings (Fig. 2A, B). The metallic part of the instrument that contacted the left neck evidenced a strong reaction on the dimethylglyoxime test, which means that the presence of nickel in concentration was sufficient to sensitize and elicit nickel dermatitis (Fig. 2C, D). Therefore, the patient was diagnosed as having allergic contact dermatitis to nickel with fiddler's neck. The former lesion improved after the application of retinoid ointment and a correction of the patient's performance position. The latter lesions disappeared following the application of topical steroids and the exchange of the metal fixture with a new one, after which the dimethylglyoxime test was negative.

DISCUSSION

Instrumental musicians are at high risk for a variety of skin conditions, because the instrument and the musicians' skin usually are in extended contact during performan-

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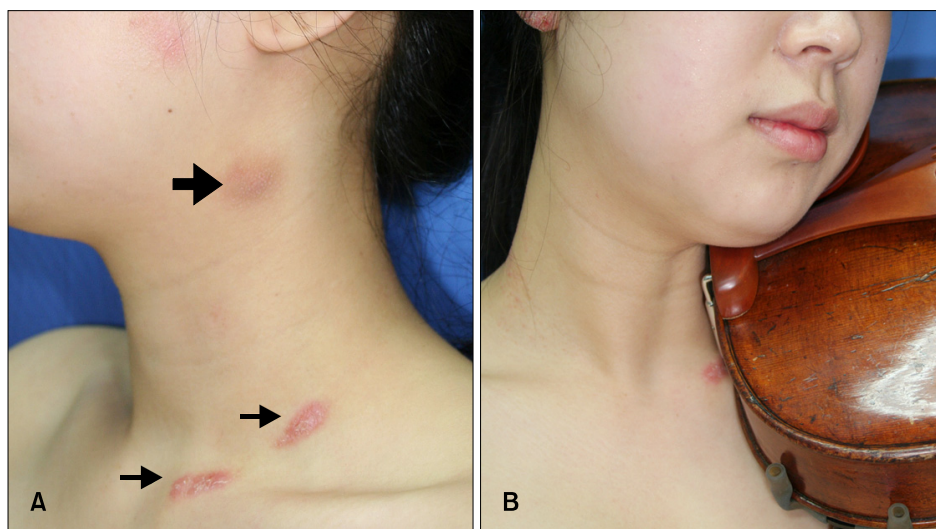


Fig. 1. (A) A hyperpigmented lichenified plaque on the neck just below the angle of the patient's left mandible (thick arrow) and erythematous scaly plaques on the left lower neck (thin arrow). (B) Performance position of the viola player.

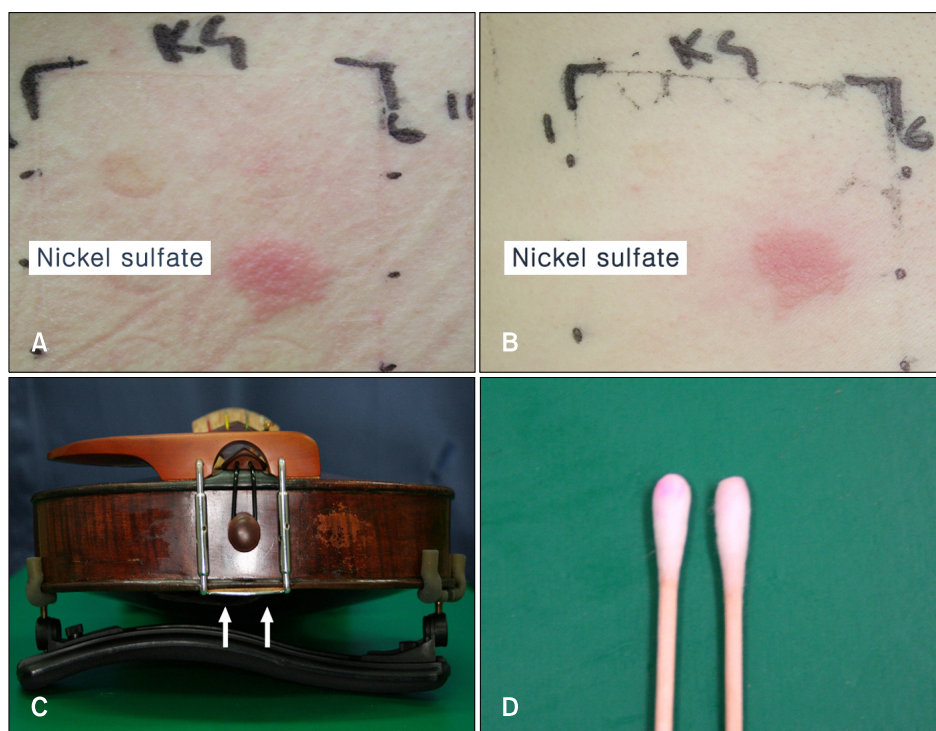


Fig. 2. Patch test results to nickel sulfate. (A) After 48 hours, (B) After 96 hours. (C, D) Metallic part of viola (arrow) showed a strong reaction to the dimethylglyoxime test.

ce^{1,2}. Skin disorders prevalent in musicians include a variety of allergic contact sensitizations and irritant skin conditions, the clinical presentation and localization of which are generally specific to the instrument used (e.g. "fiddler's neck", "trumpeter's lip", "cellist's chest", "guitar nipple", "flautist's chin")^{1,3}.

Contact allergies in musicians are usually to rosin (various string instruments), exotic woods (e.g used for chin rests), nickel, cane reeds (saxophones and clarinets) or propolis (violin varnish)⁴. Nickel, a common metal, is the most frequent contact sensitizer in the population at large. It

performs an important role in contact dermatitis in musicians, as well, and may cause dermatitis of the fingers and hands, as well as of the lip and neck regions. The release of nickel from metal devices is favored by friction, heat, or galvanic factors. Consequently, chronic mechanical irritation and maceration may not only induce irritant dermatitis, but can also promote allergic contact dermatitis^{1,2}. Therefore, allergic contact dermatitis should be considered as a differential diagnosis, although irritant contact dermatitis is far more common.

"Fiddler's neck" is the one of the most common skin

problems detected in violin and viola players¹⁻³. Clinically, these lesions generally consist of localized areas of erythema, pigmentation, lichenification, and acne-like changes including papules, pustules, and even cysts. These lesions are typically located below the jaw, where the instrument is in close contact with the skin. One of the most important etiologic factors in this condition is increased pressure on the skin of the neck. Another is increased friction as the result of a poorly fitting chin rest. Poor hygiene and excessive perspiration in hot weather, occlusions, and friction are other important factors¹⁻⁶. The histopathology of "fiddler's neck" frequently demonstrates hyperkeratosis, acanthosis, and histiocytic infiltrates with the presence of granulomas to foreign bodies and follicular cysts^{2,6,7}. Probably as the result of the complexity of the mechanisms causing fiddler's neck, the clinical appearance and histopathology of this condition evidence a broad spectrum of skin changes as compared with other common irritant contact dermatitis variants^{1,2}. Viola players are believed to be more prone to develop "fiddler's neck" than violinists, because the instrument itself is larger and heavier². To prevent this problem, proper performance technique is mandatory, and proper chinrest fit and adequate shoulder rests can also provide positional correction^{1,4,7}. A "strad pad" (foam rubber pad used to absorb perspiration) used for the cushioning and protection of vulnerable skin areas has also been reported to be helpful. Although fiddler's neck is not a life-threatening disease, it may result in impaired performance and other occupational hazards. Therefore, clinicians should be aware of the dermatologic problems unique to each musical instrument. Moreover, awareness among musicians must be raised concerning proper technique

and conditioning in order to prevent interference with performance and occupational impairments.

There has been one previous case report of fiddler's neck in Korea, in 1986⁸. In our case, it is interesting to note that the patient had both fiddler's neck and allergic contact dermatitis to nickel concurrently. Herein, we report a case of fiddler's neck with allergic contact dermatitis to nickel in a viola player. We hope that our case report will draw dermatologists' attention to the skin problems that affect musicians.

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