

# Hidetoshi Takahashi1\*, Katsuhiko Satoh<sup>1</sup>, Akiyoshi Takagi<sup>1</sup>, Akemi Ishida-Yamamoto<sup>2</sup> and Hajime Iizuka<sup>3</sup>

<sup>1</sup>Takagi Dermatological Clinic, Japan <sup>2</sup>Department of Dermatology, Asahikawa Medical University, Japan

<sup>3</sup>Department of Dermatology, Housui Medical Center, Japan

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\*Corresponding author: Hidetoshi Takahashi, Takagi Dermatological Clinic, Nishi 3 minami 4-16, Obihiro, Hokkaido 0800013, Japan, Tel: +81-155-25-6733; Fax: +81-155-25-0308; E-mail: htakahashi@cpost.plala.or.jp

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#### Abbreviation

AEGCG: Annular Elastolytic Giant Cell Granuloma

## Dear Editor,

Annular elastolylic giant cell granuloma (AEGCG) is a rare granulomatous skin disease characterized by loss of elastic fibers accompanied with elastophagocytosis by multinucleated giant cells. The clinical appearance shows annular and serpiginous plaques with hypopigmentation or skin atrophy. Ultraviolet irradiation, heat, or other unknown factors are supposed to induce pathogenic alternation [1]. The treatment for AEGCG remains unestablished and

### Letter

# Successful Treatment of Annular Elastolytic Giant Cell Granuloma with Tranilast and Topical Glucocorticoid under the Strict **Restriction of Sun Exposure**

various therapeutic modalities including intralesional and systemic glucocorticoids, psoralen plus ultraviolet A irradiation, cryotherapy, retinoids, fumaric acid esters, pimecrolimus and minocycline are applied [2,3]. We report a case of AEGCG successfully treated with oral tranilast and topical glucocorticoid with sunscreens.

A 62-year-old Japanese man was referred to our clinic, because of gradually enlarging asymptomatic reddish annular plaques with raised border on right dorsal hand and neck (Figures 1a,b). No other skin or mucosal lesions were detected. Histopathological examination revealed non-palisading granulomas in the upper and mid dermis with multinucleated giant cells showing elastophagocytosis (Figure 1c). Elastica van Gieson staining confirmed reduced elastic fibers and elastophagocytosis by multinucleated giant cells (Figure 1d). Laboratory analyses, blood cell count, biochemical tests, serum levels of blood glucose, haemoglobin A1c, and angiotensin-converting enzyme were within normal limits. These clinical and histopathlogical findings led to a diagnosis of AEGCG. The patient was advised to use sunscreens and was treated with topical 0.05% betamethasone butyrate propionate ointment and oral tranilast at 300 mg/day for 10

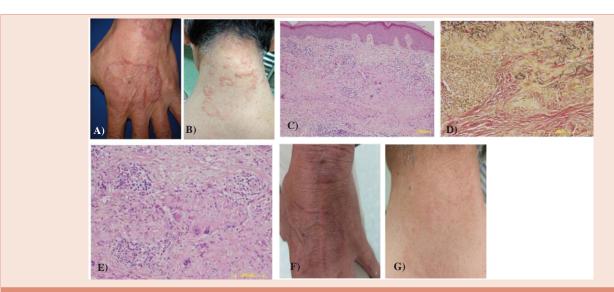


Figure 1: Patient's clinical features and histopathology. The lesion on the neck before treatment showing annular erythematous plaques with raised border on the neck (a) and the neck (b) after treatment. (c) H-E staining showed non-palisading granulomas in the upper mid dermis with multinucleated giant cells. (d) Elastica van Gieson stain showed are reduced elastic fibers and elastophagocytosis by multinucleated giant cells. The lesion on the neck (e) and the neck (f) after treatment.



weeks. The lesions gradually improved in two months (Figures 1e,f).

AEGCG is supposed to be induced by actinic damage of elastic fibers. However, the precise pathomechanism is still unclear. The treatment of AEGCG is empirical and no established therapy is available with inconsistent results. Tranilast is an anti-allergic drug and inhibits the release of chemical mediators including histamine and leukotriene from mast cells [4]. Furthermore, tranilast is supposed to inhibit the formation of multinucleated giant cells [5]. AEGCG were successfully treated with oral tranilast and topical pimecrolimus in an eight month Korean infant [1]. Our case showed the actinic damage of elastic fibers and was treated with oral tranilast and topical glucocorticoid under the strict restriction of sun exposure. Although AEGCG may show a spontaneous regression, oral tranilast and topical glucocorticoid with strict sun restriction by sun screen showed a remarkable clinical response in our case.

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