

ing the medication.

REM, first described by Steigleder, is a rare cutaneous disease, characterized by persistent erythema in a reticular pattern and/or confluent erythematous papules and plaques, with a predilection of location on the central area of the chest or on the upper back; and rarely on the arms, face and abdominal region<sup>3-5</sup>. It predominantly afflicts middle-aged women<sup>3-5</sup>. The typical histopathology is interstitial deposits of mucin in the dermis. The pathogenesis remains unclear<sup>3,4</sup>.

Antimalarial drugs are the treatment of choice for REM<sup>3-5</sup>. Hydroxychloroquine, a derivative of chloroquine, is frequently used as the first-line treatment, and it always results in rapid improvement within about a month of starting the treatment; however, recurrence is also common<sup>5</sup>. The present patient responded well to hydroxychloroquine. Unfortunately, he had hypomnesia after administrated the drug. Based on the dosage-adverse effects relationship, we considered that hydroxychloroquine is responsible for the hypomnesia, but the mechanism is unclear.

Although such a condition is very rare and the present

patient had finally recovered, practitioners should be aware of it as it may have a negative impact on patient's quality of life, and even lead severe problem.

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# Tripartite Motif-Containing 29 Expression in Squamous Cell Carcinoma

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Dear Editor:

Tripartite motif-containing 29 (TRIM29), also known as the ataxia telangiectasia group D complementing gene, is reduced in certain cancers by some reports, although, others report higher expression of TRIM29 in several cancers.

While the exact functions of TRIM proteins have yet to be

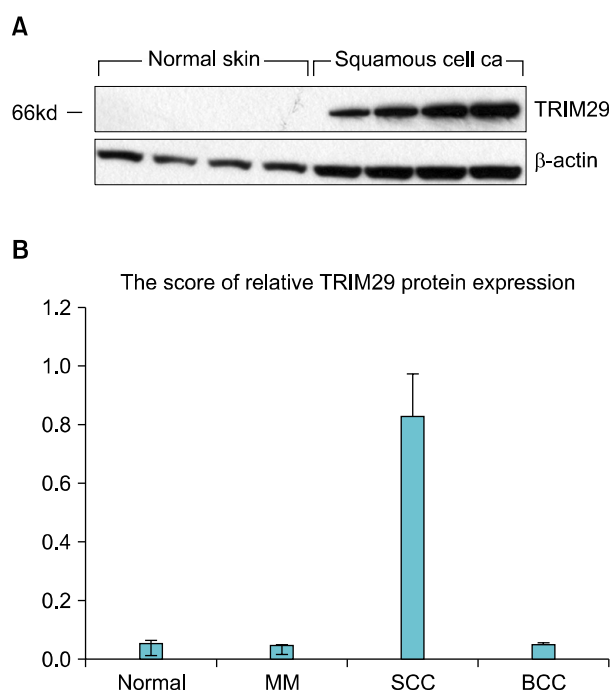
specified, they undergo viral replication, and participate in signal transduction and development in many human diseases, especially cancer.

A few members of the TRIM family are associated with cellular growth and processes, such as transcriptional regulation, cell growth, apoptosis, development and oncogenesis<sup>1</sup>. Several TRIM proteins play many roles in the

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**Fig. 1.** (A) TRIM29 protein was expressed on squamous cell carcinoma, normal skin tissue by western blot analysis. (B) The score of relative TRIM29 expression amount in western blotting. TRIM29: tripartite motif-containing 29, MM: malignant melanoma, SCC: squamous cell carcinoma, BCC: basal cell carcinoma.

cellular processes, including the development and growth of diseases, but the physiological and pathological functions of TRIM29 have not been confirmed; while its presence in the cell membrane has been observed<sup>2</sup>.

TRIM29 is typically expressed in the placenta, lung, thymus, prostate, testis, and colon, but not in the heart, brain, skeletal muscle, pancreas, spleen, ovary, or the small intestine, as measured by Northern blot analysis<sup>3</sup>.

There have not been many studies on TRIM29, but it is assessed that TRIM29 expression is suppressed in breast and prostate cancer<sup>4-6</sup>.

In a study by Schlomm et al.<sup>7</sup>, cDNA microarray analysis on prostatic cancer cells and noncancerous prostatic cells conducted using laser microdissection, resulted in 216 different genes, with TRIM29 as one of the downregulated genes.

Similarly, Ernst et al.<sup>4</sup> reported that TRIM29 was shown to be downregulated.

Liu et al.<sup>6</sup> reported that TRIM29 functions as a tumor suppressor in nontumorigenic breast cells and invasive estrogen receptor positive breast cancer using cDNA microarray analysis.

TRIM29's functions may differ depending on the cell type, but there have not been any studies on the role of TRIM29

on tumorigenesis.

TRIM29 over-expresses in lung, bladder, colorectal, ovarian, gastric, pancreatic and endometrial cancers and in multiple myeloma, and recent studies show that TRIM29 is associated with tumor invasion and lymph node metastasis.

A recent report correlated TRIM29 expression in gastric cancer and poor histological grade, large tumor size, extent of tumor invasion, and lymph node metastasis<sup>8</sup>.

The Institutional Review Board of Seoul Soonchunhyang University Hospital reviewed and approved this research protocol, which involved the use of tissue samples.

We analyzed a total of 6 normal skin tissues and 18 malignant skin tumor tissues, including 6 malignant melanoma (MM), 6 squamous cell carcinoma (SCC), and 6 basal cell carcinoma (BCC), using Western blot and immunohistochemistry.

The human MM cell line G361 served as a positive control for the TRIM29 expression.

The human MM cell line G361 was not expressed for TRIM29 protein.

In this study, TRIM29, which indicates the metastatic potentiality in gastric cancer, was measured in BCC, SCC and MM cancers, using Western blot and immunohistologic method. The results show that the expression of TRIM29 was not expressed in 6 cases of BCC with slow growth and poor metastasis. In 6 cases of SCC, which is aggressive and locally invasive, but not metastatic cancer, the expression of TRIM29 was strongly positive (Fig. 1A). In the 6 cases of MM, which is invasive and has distant sites metastatic potential through hematogenous and lymphogenous paths, TRIM29 protein was not expressed. In all six MM and BCC, TRIM29 was not expressed (data not shown). The amount of expression in Western blotting is displayed graphically (Fig. 1B).

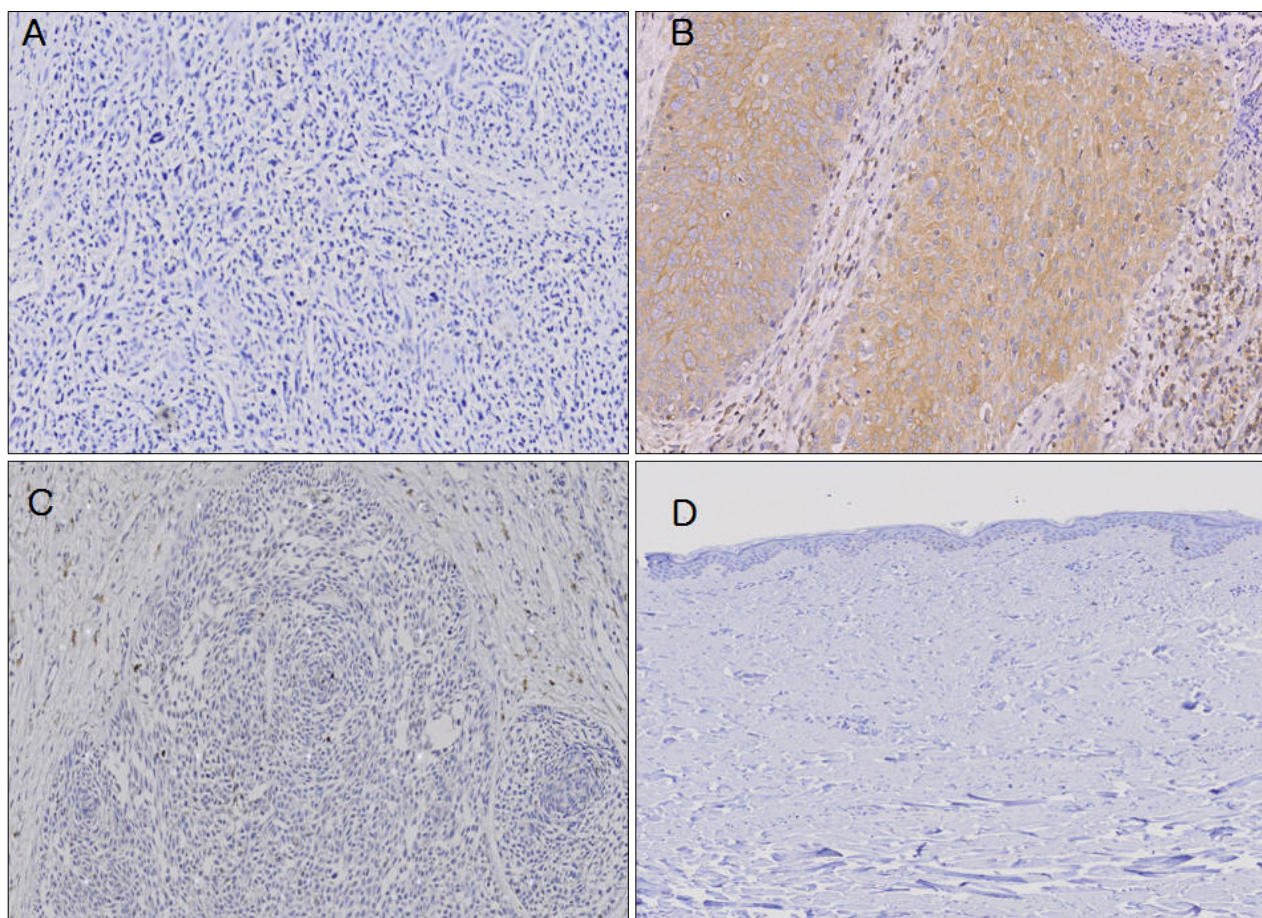
Immunohistochemical study showed that the staining pattern of TRIM29 in normal human skin tissues mirrored those of a Western blot analysis (Fig. 2).

The exact function and mechanism of TRIM29 during tumor genesis have not been confirmed.

The possible roles and mechanisms of TRIM29 protein expression in malignant skin cancers will be examined in additional studies.

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**Fig. 2.** Immunohistochemical analysis of tripartite motif-containing 29 (TRIM29) expression in (A) malignant melanoma, (B) squamous cell carcinoma, (C) basal cell carcinoma, and (D) normal skin tissue. Only squamous cell carcinoma displayed TRIM29 expression. (A, B, C:  $\times 200$ , D:  $\times 100$ ).

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