

# Coix Seed Extract on Skin Aging

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**Abstract:** Aging is unavoidable; however, the aging of the skin not only causes various problems and disorders but also becomes an obstacle to individual aesthetics. Notably, there are several anti-aging medicines and cosmetics available today, and Coix seed extract, a traditional Chinese medicine, is among them. This extract has shown improvement in onycholysis, characterized by the painless detachment of the nail from the nail bed, as aging is also a factor, in a case report of a 62-year-old woman. Further research is required to explore the potential of Coix seed extract as an anti-aging agent.

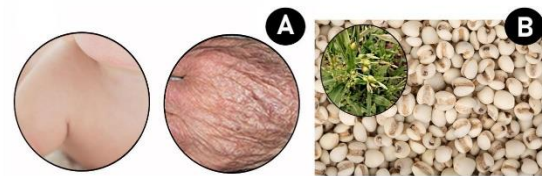
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Dear editor,

As aging progresses, not only systemic diseases, but also skin disorders from aesthetic problems to skin diseases are observed. Infants, children, and young people have firm and lustrous skin; however, this firmness diminishes with age (Figure 1A), largely due to changes in the number and function of dermal fibroblasts. [1]. It is not without reason that the age of 26 years is often referred to as the turning point for the skin, as it has been shown that the activity of dermal fibroblasts shifts from tissue activation to inhibition around this age [2]. Although we cannot return to our youth, anti-aging agents like retinoids are being developed in the beauty and cosmetic industry [3] to delay the aging process.

Coix seed (C-S) extract (Figure 1B), a traditional Chinese medicine [4], is widely marketed, claiming to have whitening properties and able to improve senile warts. The author observed that it can improve age-related thinning of the skin during wart treatment in elderly

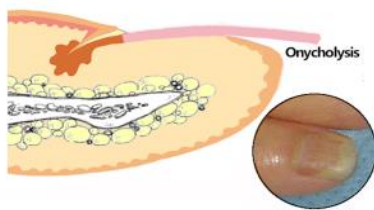
patients, although not dramatically (unpublished data). This letter examines the effect of Coix seed extract on skin aging.



**Figure 1 A;** Clinical photographs of skin of an infant and old individual. **B;** Coix seed and its plant.

In daily practice, elderly individuals often experience thinning and weakening of the skin, making them more prone to internal bleeding, such as senile purpura, particularly on the forearms, and skin peeling with minor trauma. Oral administration of C-S extract has been observed to be effective in suppressing skin peeling due to age-related weakening of skin tissue and promoting skin turnover by a small extent. Onycholysis (Figure 2) is characterized by the painless detachment of the nail from the nail bed which is sporadically associated with several

diseases, the use of certain agents, and is one of the changes observed as part of the aging process [5, 6], though its exact cause remains unknown. The author reported a case of onycholysis in a 62-years-old female treated with the C-S extract [5]. Aging appears to be a contributing factor, as seen in the effects of C-S extract on elderly individuals with onycholysis [5], though the development thresholds may vary. The author speculates that C-S extract may help modulate impaired turnover in skin-to-nail keratinization. These patient experiences suggest that C-S extract might promote the restoration of epidermal turnover, similar to retinoids [3], and thus has the potential to be used as an anti-aging agent.



**Figure 2** Illustrated schema of onycholysis and its clinical photo.

The C-S extract is commonly used based on a long history of empirical evidence [4]. The high level of safety of C-S extract supports its long-term use, even if its effects are not particularly strong, based on established practice and accumulating evidence. However, sufficient scientific research supporting its efficacy, particularly as an anti-aging agent, may still be lacking. Future studies are needed to determine the specific mechanisms through which C-S extract promotes skin turnover, as this extract holds potential for clinical use in addressing skin aging.

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## Potential Conflict of Interest

The author declares that there are no conflicts of interest.

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