



衛生署

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Poisoning Watch

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Colloidal Silver Products: What you need to know

Introduction

“Colloidal silver” is the term used to describe tiny particles of silver suspended in a liquid¹. Commercially available colloidal silver products vary widely in their production methods and composition. In many cases, colloidal silver products are marketed as oral supplements. Proponents of colloidal silver or manufacturers of colloidal silver products often claim that the products can boost immune system, fight bacteria and viruses or prevent certain diseases². To date, no scientific evidence has been found for positive health effects of internal use of colloidal silver products.

Health Risks of Using Colloidal Silver

People who internally use colloidal silver may not experience any immediate side effects. Over time, however, silver particles accumulate in the body, embedding themselves in organs and tissues, especially the skin. Chronic ingestion or inhalation of silver preparations (especially colloidal silver) can cause argyria, which is a permanent bluish-grey discolouration of the skin. Systemic manifestations including anemia, bone marrow suppression, liver function derangement and neurological deficit can ensue. Colloidal silver products may also interact with medicines or cause poor absorption of some drugs, such as thyroxine and specific antibiotics¹.



衛生防護中心
Centre for Health Protection



Local Cases of Silver Poisoning Related to Consumption of Colloidal Silver Products

The Department of Health (DH) has so far received a total of two cases of silver poisoning notifications that involved consumption of colloidal silver products in 2021 and 2023 respectively.

A case of silver poisoning with history of consumption of colloidal silver prescribed by a general practitioner

In July 2021, the DH was notified by the Hospital Authority (HA) of a case of silver poisoning with a history of oral consumption of colloidal silver prescribed by a general practitioner. The case involved a 47-year-old male patient who presented with unsteady gait and sensory loss over extremities in 2018 with history of oral consumption of colloidal silver during the period from 2016 to 2018 as prescribed by a private medical practitioner. The patient was diagnosed by the HA to be a silver poisoning case. As there was no scientific evidence that supports non-topical (internal) use of colloidal silver in treating any specific disease or condition, the DH has referred the case to the Medical Council of Hong Kong for further investigation. Press release was issued to alert public on case of silver poisoning.

A case of silver poisoning with history of consumption of colloidal silver product purchased from a local supplier

In February 2023, the DH was notified by the HA of the second case of silver poisoning involving a 66-year-old female patient with history of consuming colloidal silver, who presented with bluish-grey discoloration at fingernail beds. According to information from the HA, the patient first presented with deterioration of memory and was referred to specialist out-patient department of United Christian Hospital for follow-up. Her blood sample revealed a silver level higher than the reference level. She was diagnosed by the HA to be a silver poisoning case with argyria.

DH's investigation revealed that the patient had bought a colloidal silver product (Figure 1) from a local supplier and had used it for over 10 years, including oral



consumption as well as topical use, for improving general wellbeing. The DH issued press release to appeal members of the public not to buy or orally consume any product that contains colloidal silver and operated a hotline for public enquiries.

Four persons (1 male and 3 females, aged 7 to 67) who reported through the DH's hotline on their consumption of the same product for health improvement were referred to the HA for further investigation. While they were not found to have any signs or symptoms of silver poisoning by the HA, their serum silver levels were all found to be higher than the reference level. They had used the colloidal silver product for a period ranging from 5-10 years including oral consumption as well as topical use. Previous testing by the Government Laboratory detected silver in their products.



Figure 1: Colloidal silver product

Advice to Public

Silver has no known physiological function in human body and is not an essential nutrient¹. Chronic ingestion or inhalation of silver preparations (especially colloidal silver) can cause argyria, which is a permanent bluish-grey discolouration of the skin. Systemic manifestations including anemia, bone marrow suppression, liver function



derangement and neurological deficit can ensure.

In Hong Kong, there is no registered pharmaceutical product that contains colloidal silver as an active ingredient. There is no scientific evidence that supports non-topical (internal) use of colloidal silver for treating any specific disease or condition.

Members of the public are reminded not to buy or consume any product containing colloidal silver, including through oral consumption and intravenous administration, due to its potential risks and the lack of scientific evidence in support of health benefit through the internal use of colloidal silver. They should seek medical consultation immediately if they feel unwell after consumption of any product containing colloidal silver, in particular if discolouration of the skin is developed.

Keep Healthy in the Right Way

While there is no scientific evidence that better health can be achieved through internal use of colloidal silver products, members of the public are advised to practice healthy lifestyle to maintain good health. It includes eating a balanced diet, doing exercise, no smoking and refrain from alcohol drinking.

References

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