



Sulfur Mustard Exposure and Cherry Angiomas A Fact Sheet for Providers

FACT SHEET 64-035-1016

The Issue:

There is a substantial and growing body of medical and scientific literature indicating that cherry angiomas develop in some people following moderate to severe symptomatic exposure to sulfur mustard. Recent studies have demonstrated that between 10% and 50% of people exposed to enough sulfur mustard to cause symptoms significant enough to require extensive medical care at the time of the exposure may develop cherry angiomas between 1 and 20 years afterwards.

What are cherry angiomas?

Cherry angiomas, also known as Campbell de Morgan spots or senile angiomas, are common skin growths. They are usually found on people over the age of 30, may increase in size and number as the person ages, and can grow in most areas of the body. There are small broken blood vessels inside the angiomas giving them the bright red, or “cherry”, appearance. Cherry angiomas are benign skin findings with **no** potential to become cancerous, have no related symptoms, and usually require no treatments. They are typically small, ranging from a pinpoint to about 7 millimeters (the size of a #2 pencil eraser). They may be flat or raised, either round or oval shape, and are bright red. Cherry angiomas most commonly develop on the trunk and upper extremities.

Medical science has not identified the cause of cherry angiomas. The medical literature contains little specific information on the causes or risk factors of cherry angiomas. They are believed to have a genetic component that makes some people more likely to develop them. They have also been associated with pregnancy, exposure to several different chemicals, and climate.

Cherry angiomas and association with sulfur mustard exposure:

The recent medical and scientific literature indicates that there is likely to be a correlation between significant symptomatic exposure to sulfur mustard and the development of cherry angiomas. The exposures identified were severe enough: to have required in-patient hospitalization; to have caused significant clinical complications 16–20 years later; to have caused extensive skin blistering; or to have resulted in a greater than 25% disability, according to the study authors. Very few studies have looked at less severe exposures; those studies did not identify an association with cherry angiomas. The mustard exposure-related lesions that have been biopsied/removed are the same as normal, non-mustard-exposure-related cherry angiomas. There have been several reports in the scientific literature that inflammatory markers and certain hormones may be involved with the development of cherry angiomas. At least one small study has shown elevated levels of prolactin, but not chemokines in patients with mustard-exposure-related cherry angiomas. At this time the mechanism by which mustard exposure causes cherry angiomas remains unknown.

What is known? What is still unknown?

Based on published scientific literature, it seems that significant symptomatic exposure to sulfur mustard (moderate to severe immediate reactions including skin blistering) may be associated with the appearance of cherry angiomas. The details of this association remain unknown. These include: strength of association, average latency (delay) to develop the initial angiomas, timing of the eruptions, average duration of the cherry angiomas, average number of lesions, whether there is any correlation between degree of exposure and subsequent number of cherry angiomas developed and much other epidemiologic information.

Conclusion:

The most important message to anyone who has been exposed to sulfur mustard is that these are common skin lesions, with no known relationship to the development of other health problems either by the angiomas signaling the presence of another condition or by the angiomas themselves becoming cancerous. Therefore, even if a cause and effect relationship between significant symptomatic exposure to sulfur mustard and the development of cherry angiomas is proven, based on the currently available studies, the development of cherry angiomas will not affect longevity, activities, or lifestyle. This should be reassuring to those who develop cherry angiomas.

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