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## Escharotic agents

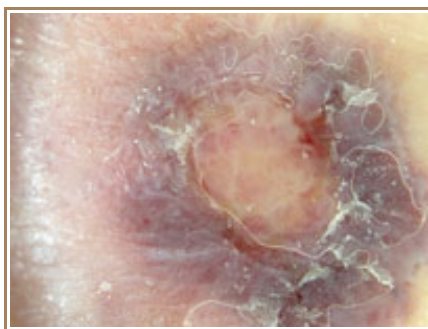
### What are escharotic agents?

Escharotic agents are caustic, corrosive salves, pastes, poultices and plasters that are purported to destroy cancer cells and cure skin cancers including [basal cell carcinomas](#), [squamous cell carcinomas](#) and [melanomas](#). They are called escharotics because they produce a thick black, dry scab called an “eschar” on the skin.

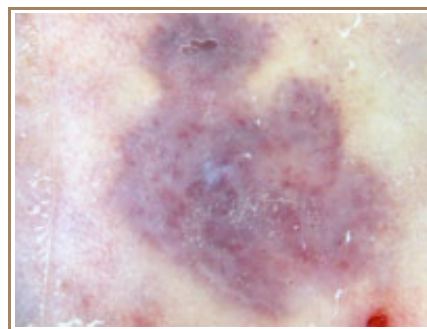
#### Effect of escharotic agents



Lesion pre-treatment



Ulceration due to escharotic agent



Damage done to surrounding skin

### What is the history of escharotic agents?

The two most common ingredients used in escharotic agents are zinc chloride and bloodroot (contains the alkaloid sanguinarine that is derived from the root of the plant *Sanguinaria canadensis*). Zinc chloride was one of the agents used as a tissue fixative in early Mohs micrographic surgery (MMS) procedures. This technique was discovered by Dr Frederick Mohs in the early 1930's and involved fixation of cancerous tissue with “Mohs paste” prior to excision. MMS has since been refined and perfected over the last 50 years and Mohs fixed-tissue technique has been replaced with Mohs fresh frozen tissue sampling. The disadvantages of fixed-tissue technique included destruction of adjacent healthy tissue, increased pain and lengthened surgical time.

During the same period as Mohs fixed tissue technique was proving to be effective in treating certain skin cancers, Harry Hoxsey, a lay cancer specialist was developing a herbal tonic and paste designed to treat internal and external cancers. Hoxsey's paste is very much like Mohs' paste and contains zinc chloride and bloodroot. Hoxsey recommended applying paste to the affected area and within days to weeks, the area would necrose (cell death), separate from surrounding tissue and fall out. This treatment was never scientifically tested or proven and in the 1950's the FDA (Food Drug Administration) condemned Hoxsey's formulas and practices. Hoxsey moved his clinics to Mexico, where some are still operating today.

### Who uses escharotic agents?

The use of escharotic agents has fallen out of practice in conventional medicine because their efficacy is unproved and their content is unregulated. In addition, conventional treatment including MMS is proving very effective at completely removing skin cancers while sparing normal healthy tissue.

People still using escharotic agents are those seeking an alternative treatment to conventional therapy. These

individuals may have a fear of surgery or are just seeking a more natural remedy. With the ever-growing use of the Internet, people are able to access information about diseases and remedies more readily. There are numerous sites that advertise escharotic agents that are backed up with unsubstantiated testimonials and claims of curing skin cancer amongst other cancers. Through these sites individuals are able to purchase escharotic agents directly and self-administer at home. One such website marketing escharotic agents has been taken offline in what appears to be in response to a published letter from the FDA. Because it marketed the escharotic agents as a drug it was subject to FDA regulations and the FDA declared that the makers of the product failed to comply with federal laws and regulations.

## Why not use escharotic agents?

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In many patients that use escharotic agents the initial outcome is often pleasing, as the tumour appears to die and fall off. However, the harm that escharotic agents can cause is often not immediately apparent. Several cases have been documented in literature where the use of escharotic agents has had detrimental outcomes. These are described below.

- The tumour appeared initially to disappear but recurred several years later requiring extensive surgery. The patient later developed metastasis (secondary growths).
- Residual tumour found on biopsy although it appeared initially to have gone.
- Severe scarring as a result of the escharotic agent.

Further dangers regarding the use of escharotics agents include:

- Non-selectivity of tissue damage: escharotic agents destroy normal tissue as well as skin cancers.
- Lesions are often undiagnosed; hence many patients self-treating may be treating anything ranging from completely harmless lesions to dangerous melanomas.
- The manufacture, marketing and distribution of escharotic agents is unregulated, so the strength and purity is unknown.
- The lack of scientific evidence for the efficacy of these agents, or their risks and side effects.

Until there is more scientific evidence of the safety and efficacy of escharotic agents, physicians and dermatologists should not be recommending the use of these products. Patients whom seek alternative therapies must be aware of the potential dangers of escharotic agents and should seek sound clinical advice from their physician before using them.

### Related information

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#### References:

- McDaniel S, Goldman GD. Consequences of using escharotic agents as primary treatment for non-melanoma skin cancer. *Arch Dermatol.* 2002;138:1593-1596 [Medline](#)
- Osswald SS, Elston DM, Farley MF, et al. Self-treatment of a basal cell carcinoma with "black and yellow salve". *J Am Acad Dermatol* 2005;53:509-11 [Medline](#)
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- Jellinek N, Maloney ME. Escharotic and other botanical agents for the treatment of skin cancer: A review. *J Am Acad Dermatol* 2005;53:487-95 [Medline](#)

#### On DermNet NZ:

- [Skin cancer](#)

#### Other websites:

#### Books about skin diseases:

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**Author:** Vanessa Ngan, staff writer

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