

The perils of Cansema

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Introduction

“Cansema®” or black salve is an alternative therapy chosen by patients to self-treat skin lesions^{1,2}. It is known by an assortment of different names and compounded in various strengths and with other ingredients^{3,4}. It is promoted as being a safe and effective treatment, however evidence would suggest otherwise^{5,6}.

There are many accounts of harm as well as improper treatment of cancer associated with the use of black salve¹⁻⁹. This ultimately leads to delay in formal diagnosis and recommended treatment, leading to unacceptable morbidity and mortality⁶.

The purpose of this is to re-iterate the dangers of using this “natural” remedy of non-melanoma skin cancers, to remind clinicians of its existence, and highlight that it is still available for purchase.



Figure 1: Black salve. From: <https://medicine.uq.edu.au/article/2018/05/science-or-snake-oil-what-black-salve>

Case

Three patients in a short period of time have attended our clinic with non-melanoma skin cancers. All patients used black salve, presenting with locally and even regionally advanced disease, leading to larger resection and reconstruction with a resultant increase in morbidity.

Discussion

Black salve is derived from the plant *Sanguinaria canadensis*, known colloquially as “blood root”^{1,2,3,7}. It is a member of the poppy family, and has rhizomes rich in cytotoxic alkaloids^{3,7}. It is used to create a strong escharotic paste which causes profound inflammation and eschar to tissues^{1,2}.

In the mid 19th century, American surgeon Jesse Fell learned of a plant used by Native Americans to treat cancer and developed it into a paste⁷. After multiple uses over time, as well as formulations, Greg Caton formulated Cansema®, a mixture of bloodroot and zinc chloride⁷.

Black salve is not subject to any regulatory controls due to its limited evidence and well documented harms^{5,6,9}. As a result, variable concentrations and combinations exist, yielding a unpredictable “batch” which adds to the danger of its use³. A study by Croaker *et al* analysed all 13 different black salve products, which revealed dramatically different constituents³. The majority of salves contained concentrations of *Sanguinaria* exceeding the cytotoxic inhibitory concentration of normal keratinocytes, with one concentration 900 times more than the inhibitory concentration³.

There are multiple case reports of cancer spread and death due to delayed diagnosis and inadequate treatment due to Cansema®, as well as significant tissue damage leading to a poor cosmetic outcome (see picture 2)¹⁻⁹. Pathological opinion so far has identified dermal scar and extensive ulceration with suppurative inflammation and tissue necrosis¹⁰.

Cansema® was ultimately banned in 2003 by the Food and Drug Administration (ref) and then by the Therapeutic Goods Administration of Australia. This ban has been extended to include all other salves based on *Sanguinaria*.

Despite this, black salve products are still available for purchase online^{2-6,9}. In our institution, it appears that patients have easy access to this medication resulting in a larger treatment burden of the head and neck requiring more extensive surgery. In one of these cases, prior treatment with black salve resulted “islands” of tumour which makes resection more difficult.



Figure 2: picture of *Sanguinaria* plant with associated concentrations, with the highest level located in the Rhizomes. From: <https://www.sciencedirect.com/science/article/abs/pii/S2210803318300575?via%3Dihub>

Figure 3: loss of left nasal alar and nasal sidewall following black salve use. From: <https://www.fda.gov/consumers/consumer-updates/do-not-use-black-salve-dangerous-and-called-many-names>



Figure 4: warning located on the Food and Drug Administration website. From: <https://www.fda.gov/consumers/consumer-updates/do-not-use-black-salve-dangerous-and-called-many-names>

Given all this, it is concerning that patients still continue to access and use black salve. There is a role for increased education for our patients to avoid unnecessary harm, delay in appropriate treatment, increased morbidity and the potential for avoidable mortality.

References

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