

# The Role of Rubbing Sesame Oil in Improving Chemotherapy Induced Phlebitis in Cancer Patients at Raha Cancer Clinic: Dezful

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## INTRODUCTION

Today, cancer is one of the most important health challenges. According to the World Health Organization (2008), the diagnosis of cancer worldwide is increasing steadily [1]. All forms of cancer are the cause of 9% of deaths Make up around the world. Cancer is the second leading cause of death in the developed world, after cardiovascular disease, accounting for 19% of deaths in developing countries, the fourth leading cause of death and the leading cause of 6% of deaths. According to statistics, a total of 50 million deaths occur annually in the world, of which more than 5 million are due to cancer [2]. to treat cancer, various methods are used, including chemotherapy, which is a systemic method [3]. This method uses cytotoxic drugs Comes [4-9].

Phlebitis is an inflammatory condition that is often characterized by a reddish appearance with a twisted and painful vein [10]. Symptoms of phlebitis include redness, fever, inflammation, pain, shooting, and swelling at the injection site [11]. Phlebitis may be caused by intravenous drug injection, infection of the tissues around the vein, trauma, or surgery in childhood and causes inflammation of the inner layer of the vein [12]. Phlebitis in addition to being alone can be dangerous and lead to clot formation and thrombophlebitis and embolism.

Factors such as old age, female gender, neutropenia, malnutrition, weakened immune system, circulatory dysfunction and peripheral neuropathy are effective in causing phlebitis [13]. Factors such as placement, size and duration of canola are also among the factors causing Phlebitis are associated with catheters.

Cancer is one of the major health challenges. Various methods such as chemotherapy for cancer treatment is used mostly used intravenously. The most common complication of catheter-related phlebitis, which affects more than half of patients and as a potential risk for infectious complications is a killer (Figure 1).

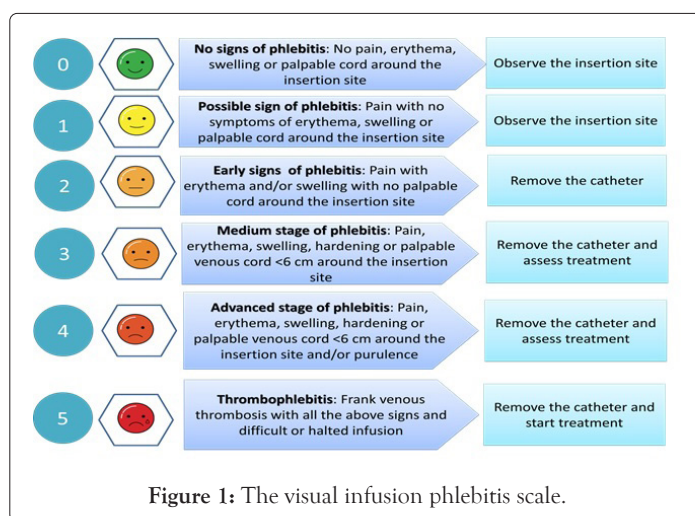


Figure 1: The visual infusion phlebitis scale.

## METHODS

In this research, sesame edible oil with 100% purity is used, which is used by Seman Company, which is approved by the Ministry of Health, and its active ingredient is equal to oleic acid (43%), linoleic acid (43%), and palmitic acid (10%). They are stearic acid (4%) and the sample was cultured and free of any bacteria and fungi.

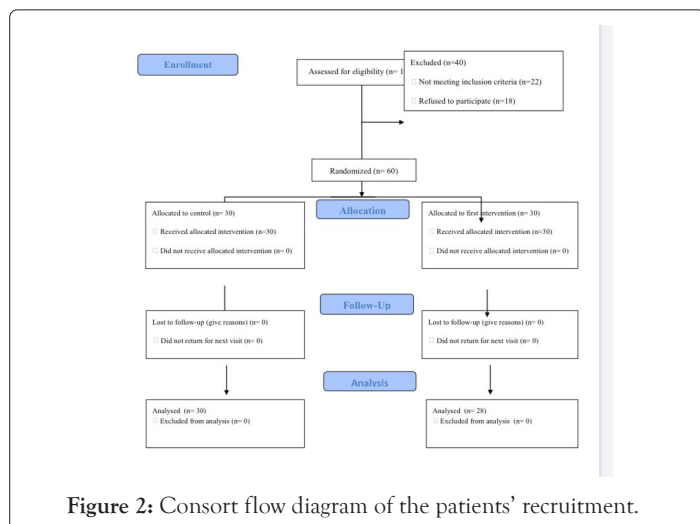
60 patients with colorectal cancer were identified according to the criteria of selection on 06.01.2019 till 11.30.2020 and randomly assigned to the intervention group (A) and control (B), In (A) sesame oil, 10 drops twice a day, and each time it is used on local phlebitis with data and then was dressing (Figure 2). Patient follow-up period was one week. Pain early physical examination as the first, the third, fifth & seven investigated.

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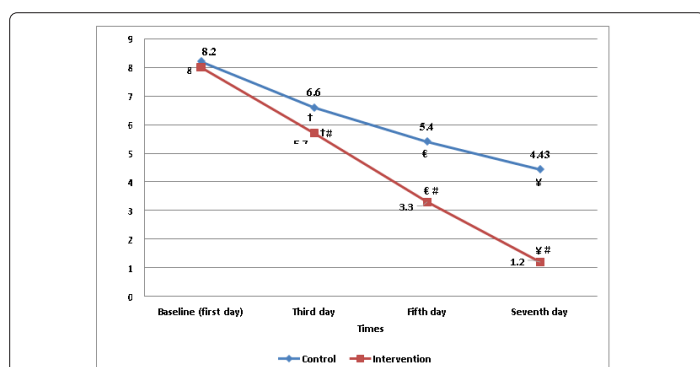


## RESULTS

In this study, in contrast to skin care training and ongoing follow-up, it is possible that patients did not heed some of the health advice. The limitations of this study were that it lasted one week. It was not enough to relieve pain and improve phlebitis in all samples and also the response to intervention in different people was due to genetic differences of different people, which was beyond the control of the researcher.

It is suggested that the effect of topical application of sesame oil on the severity of pain caused by burns with boiling water and chemical burns, as well as the effect of other medicinal plants on the severity of pain and phlebitis.

The results of the chi-square test showed that the distribution of the subjects in the two groups in terms of age, gender, location, education, marital status, occupation, race, injection site pain was similar to the first day there was a statistically significant difference ( $p > 0/05$ ). T-test results proved that the pain in the third, fifth and seventh intervention and control groups were significantly different from each other ( $p < 0/05$ ). Patients in the intervention and control groups in terms of age, sex, place of residence, marital status, education, occupation, race, site of injection, were the same. Although the incidence and severity of phlebitis factors such as age and gender are effective (Figure 3). The mean pain score in the third, fifth and seventh patient and control groups there was a significant difference.



**Figure 3:** Comparison of pain severity in intervention and control groups at the 1st, 3rd, 5th and 7th days of the intervention. (†Significant compared with the 1st day ( $P < 0.001$ ), € Significant compared with the 3rd and 1st days ( $P < 0.001$ ), ¥ Significant compared with the 1st, 3rd and 5th days ( $P < 0.001$ ), #Significant difference between group ( $P < 0.001$ )).

## CONCLUSION

The use of local sesame oil has a significant impact on reducing the severity of pain on the third, fifth and seventh compared to patients who did not use topical sesame oil in these days, and sesame oil was able to accelerate the process of healing and recovery use a topical sesame oil reduces the pain caused by trauma to the body.

## REFERENCES

1. WHO. Cancer Health. World Health Organization.2013.
2. Shojaei Tehrani Hossein. Textbook of Medicine, Prevention and Social. Chronic Non-Communicable Diseases and Common Infectious Diseases. Med Sci Tehran. 2003;4(1): 28-25.
3. Otto SE. Oncology Nursing. Ed. 4th ed Mosby, Toronto. Harcourt Health Sciences CO. 2001.
4. Ali HD. Quality of life and its related factors in cancer patients undergoing chemotherapy. J Kerm University Med Sci. 2006; 1(2): 119-110.
5. Devita V, Lawrence T, Rosenberg S. Cancer: Principle and Practice of Oncology, 8th ed, Philadelphia: Lippincott. Williams and Wilkins. 2008; 330-380.
6. David H. Infection due to Percutaneous Intravascular Devices. In: Principle and Practices of Infectious Disease. 6th ed. Philadelphia: Churchill Livingstone. 2005; 3347-3352.
7. Potter PA, Perry AG. Fundamental of Nursing. 5th edition, St Louis. Mosby Inc, 2004.
8. Castledine G. Nurses role in peripheral venous canulation. British Journal of Nursing. 1996; 5(2): 394-399.
9. Mimoz O, Villeminey S, Ragot S, Dahyot C, Laksiri L. Chlorhexidine-Based Antiseptic Solution vs. Alcohol-Based Povidone-Iodine for Central Venous Catheter Care. Inter Med. 2007;167(19):2066
10. Marmel LA. Prevention of Intravascular catheter-related infection. Ann Int Med. 2000;132:391-402.
11. Blot F. Infection of intravascular perfusion sets. Rev Pract. 2003;53:2119-2127.
12. Hamilton H. Complications associated with venous access devices: Part two. PubMed. 2006, 20(27):59-65.