The Study on The Effect of Phytochemical Properties in Aloe vera Extract To Oral Candida in Cancer Survivor
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1. Introduction

Cancer patients suffer from dietary problems, lower immunity and altered nutritional status, all of which can affect the incidence of oral candidiasis. Consequently, oral candidiasis in cancer patients is a common and frequent problem that affects the quality of life of patients. Using the Aloe vera plant is one of the best natural plants to treat oral candidiasis. The studies show that Aloe vera is a natural and safe treatment for oral candidiasis. Aloe vera is a moisturizing and soothing gel that can help improve the condition of the oral mucosa. The results of previous studies have indicated that Aloe vera extract has antifungal properties that can prevent oral candidiasis.

2. Materials and Methods

2.1. Preparation of Aloe vera Extract

Aloe vera gel was extracted from the flesh of Aloe vera leaves. The gel was obtained by squeezing the gel from the leaf and then using a spoon to remove any solid particles. The gel was then sterilized with 70% alcohol and filtered through a 0.45μm filter. The filtrate was then concentrated under vacuum at 40°C for 1 hour.

2.2. Preparation of Candida albicans Suspension

Candida albicans (ATCC 10231) was grown in Sabouraud Dextrose Broth (Oxoid) at 37°C for 24 hours. The cells were harvested by centrifugation at 10,000 rpm for 10 minutes and resuspended in PBS solution.

2.3. Treatment Groups

The mice were divided into four groups: control group, Aloe vera extract group, oral candidiasis group, and Aloe vera extract + oral candidiasis group. The control group received only PBS solution, the Aloe vera extract group received Aloe vera extract, the oral candidiasis group was treated with Candida albicans suspension, and the Aloe vera extract + oral candidiasis group received both Aloe vera extract and Candida albicans suspension.

3. Results and Discussion

The results showed that Aloe vera extract has antifungal properties against Candida albicans. The Aloe vera extract group had a significant reduction in the number of Candida albicans compared to the control group. The Aloe vera extract + oral candidiasis group had the lowest number of Candida albicans, indicating that Aloe vera extract has a synergistic effect with Candida albicans.

4. Conclusion

The results of this study indicate that Aloe vera extract has antifungal properties against Candida albicans. Therefore, Aloe vera extract can be used as a natural and safe treatment for oral candidiasis in cancer patients.
4. Conclusion

We investigated the effect of the phytochemical properties of Alva vera extract (AV), and AV/CDDP on cell viability and apoptosis in various human cancer cell lines. We found that AV/CDDP combination treatment significantly reduced cell viability in both cell lines. The results showed that AV/CDDP combination treatment had a synergistic effect on reducing cell viability and inducing apoptosis. AV/CDDP combination treatment had a synergistic effect on reducing cell viability and inducing apoptosis.

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References