

Nutrition's Effect on Sickle Cell: Literature Review

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Sickle cell anemia is a genetic disorder that alters hemoglobin, which carries oxygen through the body, causing a person's red blood cells to be sickled (NHLBI, 2020). This literature review discusses how nutrition affects a patient's quality of life. In addition, it looks into how the number of micronutrients and protein can affect a patient with sickle cell.

Influence of Nutrition on Disease Severity and Health-related Quality of Life in Adults with Sickle Cell Disease: A Prospective Study

This article studies adults' medical and dietary history with sickle cell disease (Kamal, 2021). Furthermore, it investigates how patients with sickle cell disease nourished versus undernourished are affected due to nutrition (Kamal, 2021). With the proper amount of nutrients, this study states that it can improve patient outcomes with the effects of the disease.

Key Points

For this study, Kamal and his colleagues enrolled 18 plus men and women with hemoglobin S (HbSS) genotype sickle cell disease for 93 months (Kamal, 2021). There were two studied groups, Group A was well-nourished and had no macro or micro- nutritional deficiencies, Group B had macro and micro- dietary deficiencies, and a control group of healthy individuals (Kamal, 2021). The study looked at the patients' medical history, diet intake, weight alterations, and more. The results showed a significant weight, height, and BMI difference between Group A and B. It also showed Group B had frequent episodes and higher SCD severity scores (Kamal, 2021).

Assumptions

The article states that sickle cell patients with micro and macro- nutritional deficiencies are more likely to be hospitalized and have a more severe crisis. But well-nourished patients are not as likely to have as many painful, life-threatening crisis. If sickle cell patients monitor their macro and micro- nutritional levels, their quality of life will be significantly better than patients that are unnourished.

Deficit/Conclusion

After doing research, the conclusion of this article states that adults with sickle cell that are macro and micro- malnourished have a lower health-related quality of life than those who are nourished (Kamal, 2021). I do accept the authors' line of reasoning due to the data provided. It shows how the lack of nutrients triggers SCD patients' episodes. This article implies that nutrition affects SCD patients; it states that if a patient is macro and micro- malnourished, they will have more severe scores. If nursing fails to accept the article's line of reasoning, this may be too due to the age range, being that the study only used patients that were 18 and older and the need for more participants. Though they studied the patients for 93 months, it may not be enough to prove that nutrition plays a role in the severity of sickle cell disease.

References

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