

Decreasing rates of neutropenia in the chemotherapy patient

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Neutropenia is a disease characterized by a low neutrophil count, which can be caused in a variety of ways. Certain medication can cause a low neutrophil count, especially those used for chemotherapy in cancer patients (Deinard et al, 1974). The primary concern for these patients is that neutropenia often means that chemotherapy treatment must be halted to prevent any further problems, and this delay may cause devastating cancer growth. The symptoms and complications of neutropenia are immune system related, and include high fever and frequent infections and is diagnosed with a blood cell count (Deinard et al, 1974). It is because of these complications that many are interested in reducing the rates of neutropenia in the chemotherapy patient, and is the reasoning behind developing this PICO question.

In this case, the patient is those currently receiving chemotherapy treatment suffering from neutropenia. The suggested intervention is giving information and education to both patients and clinical staff about the dangers, risks and avoidance of neutropenia. To check this, a comparison needs to be made between the frequency and complications of neutropenia in the hospital before and after this intervention. The suggested outcome is that there will be a decrease in the number of neutropenia cases and the number of infectious complications from this disease. These decisions were made after extensive research into the available literature on this topic.

Cameron (2009) suggests that letting patients know the signs and symptoms of neutropenia if they are at risk from chemotherapy treatment will allow

them to recognize these signs early and receive treatment. This should prevent any complications (such as infectious disease) and prevent a delay to chemotherapy. This again suggests that the outcome of education will be a reduction in neutropenia. Matias et al (2010) also suggest that the length of time before neutropenia becomes apparent can be estimated in chemotherapy patients, allowing staff to put patients at this stage of treatment on watch to help reduce complications.

Taking this information into account, it was necessary to design a method for practise-based change. As the need for this change had already been found, it was only necessary to find appropriate methods of education for staff and patients alike that could help reduce the number of cases of neutropenia. It was suggested that seminars and information leaflets could be the most useful in this case, and that distribution of these to everyone involved should occur. To check the results of this program, it would be necessary to statistically compare the number of cases of neutropenia in the cancer ward before and after this education.

In conclusion, there is a lot of evidence that this system could work and should undergo a trial run in one healthcare establishment. This would allow for any problems to be found before releasing the program on a national scale. This program has the potential to improve the lives of many living with cancer, and perhaps even improve life expectancy in some case.

Works Cited

Cameron, D. (2009). Management of chemotherapy-associated febrile neutropenia. *Br J Cancer*, 101(S1), S18-S22.

Deinard, A. S., Fortuny, I. E., Theologides, A., Anderson, G. L., Boen, J., &

<https://assignbuster.com/decreasing-rates-of-neutropenia-in-the-chemotherapy-patient/>

Kennedy, B. (1974). Studies on the neutropenia of cancer chemotherapy. *Cancer*, 33(5), 1210-1218.

San Matías, S., Clemente, M., Giner-Bosch, V., & Giner, V. (2011). Predicting the duration of chemotherapy-induced neutropenia: new scores and validation. *Annals of Oncology*, 22(1), 181.