

Risk of Lymphoma in Patients with Ulcerative Colitis Treated with Thiopurines

Michel Lesky*

Department of Medicine, University of Bremen, Germany

Introduction

In this issue of gastroenterology, describe a four-fold rise in the incidence of stomach cancer in a nationwide retrospective analysis. Lymphoma risk in ulcerative colitis patients thiopurines are thiopurines are thiopurines They confirm the size and scope of the problem. Previously reported reversibility of risk in a prospective state-wide observational cohort², and they Moreover, it is suggested that the risk gradually increases with age and length of treatment. Despite the increased use of anti-tumour necrosis factor (TNF) medicines, the vast majority of patients with inflammatory bowel disease (IBD) exposed to immunosuppressants in nationwide cohorts³ and medico-administrative databases still receive thiopurines as monotherapy on a long-term basis. Severe infections and cancers, for which the range varies among immunosuppressant classes and some patient variables, such as age and gender, are the main life-threatening concerns associated with the use of immunosuppressants.

Description

Under the influence of thiopurines, younger patients are at a greater risk of severe primary viral infections (mostly Epstein-Barr virus [EBV]), whereas elderly patients are at an increased risk of secondary viral infections. Anti TNF medication increases the risk of serious bacterial and fungal infections. All thiopurine-treated patients are at risk. Having a high incidence of post-transplant-like lymphomas Men's symptoms are more pronounced as they get older. The most common fatal infections observed in thiopurine-exposed patients are deadly forms of varicella and severe forms of hemophagocytic lymphohistiocytosis, both of which can aggravate initial EBV infection. The majority of adults over the age of 30 are seropositive for EBV and thus are not at risk of developing severe primary EBV infection, whereas 20%–30% of children, adolescents, and young adults are seronegative for EBV and thus are at risk of developing severe primary EBV infection if they become infected. To identify patients at risk, all IBD patients should be tested for EBV before starting thiopurines.

The recommendations do not yet recommend this serologic screening. In my practise, test all patients for EBV serology before starting thiopurines, and consider other immunosuppressants, if appropriate for the anatomic and clinical condition, above thiopurines in patients seronegative for EBV. To yet, no significant risk of deadly fungal or bacterial infections, such as tuberculosis or pneumococcal pneumonitis, has been observed in adult and elderly patients with managed IBD who are undergoing monotherapy with thiopurines. As a result, the risk of drug-induced cancer is the key limiting factor in the long-term use of thiopurines in adults with IBD.

*Address for Correspondence: Michel Lesky, Department of Medicine, University of Bremen, Germany, E-mail: leskymichel@emline.org

Copyright: © 2022 Lesky M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 04 February, 2022, Manuscript No. cgi-22-61431; Editor assigned: 06 February, 2022, PreQC No. P-61431; Reviewed: 17 February, 2022, QC No. Q-61431; Revised: 22 February, 2022, Manuscript No. R-61431; Published: 28 February, 2022, DOI: 10.37421/cgi.2022.07.158

Lymphoma and nonmelanoma skin cancers are the most commonly encouraged malignancies by thiopurines. The majority of induced nonmelanoma skin cancers, such as basal cell carcinoma and squamous cell carcinoma, are not life threatening, in contrast to melanoma, which does not appear to be increased by thiopurines independently after controlling for confounders. Furthermore, the increased risk of nonmelanoma skin malignancies appears to persist when thiopurine use is stopped. These two factors, when combined, recommend lifetime dermatologic screening and sun protection in thiopurine-treated patients, but not necessarily a limited treatment term.

The risk of lymphoma is perhaps the most important limiting factor of long-term thiopurine therapy, with an influence that grows with patient age. In the general population, the risk of non-Hodgkin lymphoma rises dramatically with age. 10 During exposure to the medicine, the age-adjusted risk of lymphoma is magnified fold and is decreased to that of the general population after drug withdrawal. Thiopurines are linked to three different forms of lymphoma. The first two are related to children, adolescents, and young adults, which helps to explain the 'first peak' of lymphoma in thiopurine-treated IBD patients [1-5].

Conclusion

Young (35 years old) men who are EBV seronegative may develop deadly early post-mononucleosis lymphoproliferation², which is similar to X-linked lymphoproliferative illness. This danger can be decreased by limiting the use of thiopurines in young male patients who are EBV seronegative. Hepatosplenic T-cell lymphoma is the second subtype of lymphoma that is seen in young people. This lymphoma is extremely rare, usually fatal, and not caused by EBV. It generally affects men under the age of 35 who have been treated for more than two years with a combination of thiopurines and anti-TNF medications. Limiting the use of a combination of thiopurines and anti-TNF medicines in young males beyond a 2-year treatment duration especially when IBD is managed, could lower the incidence of such lymphomas.

Acknowledgement

We thank the anonymous reviewers for their constructive criticisms of the manuscript. The support from ROMA (Research Optimization and recovery in the Manufacturing industry), of the Research Council of Norway is highly appreciated by the authors.

Conflict of Interest

The Author declares there is no conflict of interest associated with this manuscript.

References

1. Crandall, Wallace, Michael D. Kappelman, Richard B. Colletti, and Ian Leibowitz. "Improve care now: The development of a pediatric inflammatory bowel disease improvement network." *Clin Gastroenterol J* 7 (2022): 450-457.
2. Gensollen, Thomas, Amit Gandhi, Gurdyal Singh Besra, Russell Hauser, and Amadeu Llebaria. "Dietary and microbial oxazoles induce intestinal inflammation

- by modulating aryl hydrocarbon receptor responses." *Clin Gastroenterol J* 7 (2022): 1123-1134.
3. Aglaia, Zellos, Debray Dominique, Indolfi Giuseppe, Czubkowski Piotr and Samyn Marianne. "Proceedings of Espghan Monothematic Conference 2020: "Acute Liver Failure in Children": Diagnosis and Initial Management." *Clin Gastroenterol J* 7(2022): 45-56.
 4. Benchimol, Eric I., Astrid Guttman, Linda Rabeneck, and Anne M. Griffiths. "Changes to surgical and hospitalization rates of pediatric inflammatory bowel disease in Ontario, Canada." *Clin Gastroenterol J* 7 (2022): 2153-2161.
 5. Olsen, Anja, Jane Christensen, Erik Berg Schmid, and Kim Overvaad. "An association between dietary arachidonic acid, measured in adipose tissue, and ulcerative colitis." *Clin Gastroenterol J* 7 (2022): 1912-1917

How to cite this article: Lesky, Michel. "Risk of Lymphoma in Patients with Ulcerative Colitis Treated with Thiopurines." *Clin Gastroenterol J* 7 (2022): 158.