

Preface: Gaucher Disease and Cancer

In this special issue the relationship of Gaucher disease to malignancy is explored in depth. For many years, multiple reports have attempted to substantiate this relationship, but until recently, the reported studies have not been convincing. Rosenbloom and Weinreb present an up-to-date review on Gaucher disease so the reader will understand the clinical, pathophysiological, and molecular aspects of the illness as well as the available treatment options. With this background, the other authors in this issue have dissected specific aspects of the disease and ultimately, the relationship of Gaucher disease to cancer. Pandey and Grabowski extensively review the immunological aspects of Gaucher disease. Specifically, they untangle the effects of accumulated glucocerebroside on macrophage function and its potential for causing cancer. Cabot and his colleagues examine the impaired sphingolipid metabolism in Gaucher disease and how cancers may arise. Weinreb and Lee examine the causes of death in Gaucher disease before the era of enzyme replacement therapy. A clear-cut increase in the risk of certain

cancers is noted. More specifically, Ayto and Hughes review the relationship of Gaucher disease with multiple myelomas by examining the possible causes of immune system dysfunction. Lastly, Mistry et al. very effectively synthesize a conceptual model of how an inborn error of metabolism can lead to macrophage dysfunction and immune dysregulation and ultimately the development of cancer.

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