The Prevalence and Management of Cardiovascular and Venous Thromboembolic Disease in Older Patients with Hemophilia – A Multicentre Retrospective Cohort Study

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In the non-hemophilia population, treatment of cardiovascular (CV) risk factors has resulted in a 50 percent decrease in deaths from CVD over the past 30 year. Most information on hemophilia and cardiovascular risk in the literature has been derived from case reports or case series. There is a paucity of good quality information on risk factors, treatment and outcomes among individuals with hemophilia. Current clinical practice guidelines recommend that treatment decisions regarding CVD prevention in patients aged 40 or older with bleeding disorders and no previous history of cardiovascular disease have their global CVD risk calculated every 5 years but no standard treatment approach is suggested. Furthermore, there are no guidelines for antithrombotic prophylaxis for the prevention of VTE in the hemophilia population undergoing orthopedic or other major surgeries. As a result, many physicians may assume that the presence of a bleeding disorder is a contraindication to the use of any antithrombotic or antiplatelet agent, thus altering their management of known CVD or VTE risk factors from the established standards of care.

In summary, cardiovascular or venous thromboembolic events in patients with hemophilia poses a significant dilemma to treating physicians. Due to the low frequency of occurrence of this combination, a multicenter retrospective cohort study is the most efficient and cost effective way to obtain initial information in older hemophilic patients with cardiovascular disease and VTE and assess the existing treatment approach. This study will help to elucidate the epidemiology, optimal treatment, factor coverage, safety of treatment, and outcomes associated with cardiovascular disease in patients with hemophilia in Canada

In this study, we seek to evaluate the risk factors, prevalence and current management of CVD and VTE in patients with hemophilia over the age of 35. The information derived from this review will provide a point estimate of the frequency of these diseases in patients with hemophilia and a "snap shot' of management of these conditions and treatment complications as compared to widely accepted guideline recommendations for managing the non-hemophilia affected population.

The preliminary data from this study will provide a necessary first step in planning a future prospective cohort study or registry to evaluate the optimal treatment, factor prophylaxis, safety of treatment, and outcomes associated with CVD and VTE in patients with hemophilia in Canada.