The aim of this study was to assess CVAD use in the Canadian Hemophilia Primary Prophylaxis Study (CHPS), a single-arm, multi-centre prospective study whereby factor use is tailored to individual prophylactic need” Langley et al (2015).

Reference:


Abstract:

INTRODUCTION: Haemophilia A treatment with factor VIII concentrates requires frequent venipunctures; a central venous access device (CVAD) may be required to facilitate reliable venous access, especially in young children. While CVADs provide reliable venous access, complications such as infection and thrombosis may occur.

AIM: The aim of this study was to assess CVAD use in the Canadian Hemophilia Primary Prophylaxis Study (CHPS), a single-arm, multi-centre prospective study whereby factor use is tailored to individual prophylactic need.

METHODS: Participants received a tailored, escalating dose, prophylaxis regimen of increasing frequency of FVIII infusions: step-1: 50 IU kg(-1) once weekly; step-2: 30 IU kg(-1) twice weekly; and step-3: 25 IU kg(-1) on alternate days, according to their level of bleeding. CVAD insertion was at the discretion of the local health care team. Details regarding CVAD use during this protocol were analysed.

RESULTS: Fifty six boys were enrolled, 21 required 25 CVADs due to difficult venous access. CVADs were inserted at a median age of 1.3 years (range: 0.6-2.1) and were removed at a median age of 8.7 years (range 6.3-11.8). Six participants experienced non-life threatening
CVAD-complications, the most frequent being device malfunction requiring CVAD replacement (n = 4). Two boys were shown to have CVAD-associated thrombosis detected on routine imaging; one required removal due to infusion difficulties and the other was asymptomatic and did not require device removal. No CVAD-related infections were documented.

CONCLUSION: Our study shows that the CHPS tailored prophylaxis regimen is associated with a decreased requirement for CVADs and with few device-related complications.

Thank you to our partners for supporting IVTEAM