S(P)EAR alert: August 2011

For the attention of the S(P)EAR designated contact individual(s) at each WMDA member registry

Dear Colleagues,

The S(P)EAR committee have recently been informed of a donor death due to a tension haemo/pneumothorax related to the insertion of a central venous catheter (CVC).

Since 2002, the WMDA has been notified of 5 other CVC related SEAR:
- 3 episodes of bleeding/bruising (+/- hospitalisation) following insertion/removal of a femoral CVC
- 1 episode of a supraventricular tachycardia during CVC insertion
- 1 Horner syndrome following CVC insertion

Two publications in unrelated donors refer to the use of CVCs:
1. In 2408 NMDP donors, 17% of female and 4% of males had CVCs inserted. Central lines were placed with comparable frequencies in the internal jugular, subclavian, and femoral veins. Complications are not stated. (Pulsipher et al. Blood. 2009 Apr 9;113(15):3604-11)
2. In a joint EBMT/IBMTR study, 20% of 828 evaluable PBSC donors had a central catheter placed for leukapheresis. Those with CVCs were more likely to require only one collection than donors collected with a peripheral venous catheter (55% vs 39%, \( p = 0.03 \)). However, patients having central vascular catheters were more likely to have a complication reported (3.6% vs. 1.1%, \( P = 0.02 \)). The authors suggest caution in the use of central vascular catheters for cell collection. (Anderlini et al. BMT April (1) 2001, Volume 27, Number 7, Pages 689-692)

The WMDA does not currently have specific guidelines or standards concerning the suitability of, mechanism for, or site of CVC placement.

**RECOMMENDATIONS of the WMDA S(P)EAR COMMITTEE:**
- We urge all stem cell donor registries to review their policies concerning the placement of CVCs.
- If a stem cell donor registry does not have a policy concerning CVC placement, one should be written.
- Insertion of a CVC for PBSC collection should only be used in exceptional circumstances i.e. only when peripheral venous access is not deemed feasible after skilled assessment or cannot be obtained or has failed.
• The policy should cover, at a minimum, the need for the following:
  o Requirement for careful peripheral venous assessment at the time of donor medical evaluation.
  o Evidence that alternative methods of donation have been discussed if appropriate.
  o Written justification for placement of for a CVC.
  o Consenting procedures (and counselling) for CVC insertion, including who should take informed consent.
  o Qualifications and expertise of the person(s) permitted to insert the CVC.
  o Permissible sites for CVC insertion.
  o The requirement for radiological guidance for all CVC inserted above the umbilicus, if locally available.
  o The need for in-hospital care for all donors with CVCs, cared for by appropriately trained personnel.
  o The requirement for reporting SAE/AEs.