

Guidelines for the Blood Transfusion Services

5.8: Component donation by apheresis

<http://www.transfusionguidelines.org/red-book/chapter-5-collection-of-a-blood-or-component-donation/5-8-component-donation-by-apheresis>

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Guidance for collection procedures is identical to that for normal whole blood donations except for the points listed below.

Performance of the venepuncture: Once the venepuncture is performed subsequent procedures such as releasing clamps on the bleed line should follow the protocol for the particular type of apheresis procedure being undertaken.

Anticoagulation: This occurs automatically in apheresis, but instructions are needed to ensure apheresis machine operators monitor the flow of anticoagulant.

Consideration should be given to withdrawing donors who repeatedly show signs and/or symptoms of citrate toxicity from the apheresis panel. Prophylactic oral supplementation with calcium should be discouraged.

Blood flow and monitoring: Blood flow occurs automatically in apheresis, unless a satisfactory flow rate cannot be maintained.

Instructions are needed for the apheresis operator in the event of a low-flow or no-flow situation. Particular care is needed when monitoring the return flow rate since most apheresis procedures operate with a pumped red cell return such that haematomas can rapidly form unless appropriate action is taken to prevent this from occurring.

Sample collection: In apheresis sampling should take place at the beginning of a component donation.

Completion of the donation and quality control samples: Local procedures must give clear instruction on removal of the apheresis harness, sealing the component bag(s) and the removal of the needle for all harness types in use. All used disposable equipment must be discarded in such a way as to prevent any risk to personnel, according to Health and Safety regulations.

Final donation inspection: The collected apheresis components must be inspected routinely for the presence of haemolysis, unwanted red cell contamination, other abnormal appearance or evidence of clotting. Such changes may require a review of the apheresis procedure and/or equipment. Any suspected apheresis component abnormality must be recorded, and the donation must be identified and reported in accordance with local quality systems.