Arterial Phlebotomy in a Whole Blood Donor and Consequent Adverse Events

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Dear Editor,

Whole blood is drawn from the vein of a blood donor, however an arterial phlebotomy may happen accidentally. A bright packed red cell unit (Fig. 1) led to the retrospective discovery of an arterial phlebotomy. A 37 year old first time female donor had a difficult phlebotomy during a blood donation camp. The records revealed that the whole blood was collected in nearly 3 min and she had to stay in the blood bank for nearly 40 min for the bleeding from the phlebotomy site. Later she also experienced a moderate vasovagal reaction (unconsciousness). The donor when contacted revealed that the blood ooze continued for nearly

7 h after the donation. Extensive bruising and stiffness but no swelling or hematoma was present in the forearm.

An arterial puncture is a rare complication of blood donation (0.014%) and should be recognized at the earliest. Immediate removal of the needle and direct pressure for 10 min can prevent the complications of prolonged bleed, hematoma, arteriovenous fistula, pseudoaneurysm and compartment syndrome [1]. Once the bleeding stops, a pressure bandage should be applied. A rapidly filling blood bag with pulsating tubing/needle and bright red blood should raise the suspicion of an arterial puncture.

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Fig. 1 Arterial phlebotomy in blood donor

Author's Contribution NA did the clinical study and designed the manuscript. AA and YM prepared the manuscript and assisted in the research.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964

Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Reference

1. Newman B (2013) Arm complications after manual whole blood donation and their impact. *Transfus Med Rev* 27:44–49