



Project to Collect Medical Near-Miss/
Adverse Event Information

Medical Safety Information

No.126, May 2017

Blood Sample Taken from Limb During an Infusion in the Same Limb

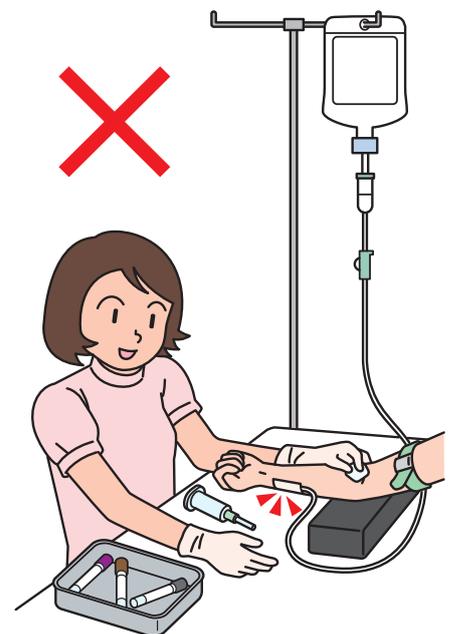


Three cases have been reported in which a blood sample was taken from a limb while the patient was receiving an infusion via a peripheral venous line in the same limb, affecting the laboratory data (information collection period: from January 1, 2013 to March 31, 2017). The information is compiled based on “Individual Theme Review” (p.136) in the 10th Quarterly Report.

Cases have been reported in which a blood sample was taken from a limb while the patient was receiving an infusion via a peripheral venous line in the same limb, affecting the laboratory data and resulting in treatment that the patient did not actually need being ordered or carried out.

Site of Sample Collection	Examination Result	Treatment Ordered or Carried Out	Background
Left arm	Blood glucose level 656mg/dL	Administration of Humulin R 10 units	<ul style="list-style-type: none"> The patient had undergone breast cancer surgery and a sign stating “Do not use the right arm to take blood samples or measure blood pressure” was at the head of the patient’s bed
Not specified	Rise in blood glucose level	Excessive insulin therapy	<ul style="list-style-type: none"> The staff member was concentrating on taking the blood sample and did not notice that the patient was receiving an infusion
Right arm	Sodium 110mEq/L Potassium 7.8mEq/L	Administration of Calcicol / GI therapy	<ul style="list-style-type: none"> The patient had a PIC catheter indwelling in the left arm The staff members did not know that taking a blood sample from a limb during an infusion could affect the examination results

Image of case 1



Blood Sample Taken from Limb During an Infusion in the Same Limb

Case 1

When taking a blood sample from a patient who had undergone breast cancer surgery, Nurse A saw that there was a sign stating “Do not use the right arm to take blood samples or measure blood pressure” at the head of the patient’s bed, so Nurse A took the blood sample from the left arm, in which the patient was receiving an infusion via a peripheral venous line. One hour later, Nurse B received a report from the clinical laboratory department that the patient’s blood glucose level had risen to 656mg/dL. Nurse B reported this to the attending physician and, having received an order to administer Humulin R 10 units, prepared the drug and went to the patient’s room. When Nurse B explained to the patient that insulin was to be administered, the patient asked why their blood glucose had risen and the nurse noticed that the blood sample had been taken from the left arm, in which the patient was receiving an infusion.

Case 2

When taking a blood sample, Night Nurse A avoided the left arm, in which the patient had an indwelling PIC catheter, and instead took the blood sample from the right arm, in which the patient was receiving an infusion via a peripheral venous line. The physician ordered a re-examination after being informed by the clinical laboratory department that the patient’s results showed panic values of 110mEq/L for sodium and 7.8mEq/L for potassium. Nurse B, who received the order, again took the blood sample from the patient’s right arm. As the results of the second examination also showed panic values, the physician administered Calcicol and GI (glucose-insulin) therapy. Subsequently, the physician noticed that a padded adhesive bandage of the kind applied after taking a blood sample was attached to the patient’s right arm and realized that the blood sample had been collected from the right arm while the patient was receiving an infusion in the same arm. Nurses A and B did not know that taking a blood sample from a limb during an infusion could affect the examination results.

Preventive measures taken at the medical institutions in which the events occurred

- All staff at the hospital will be made fully aware of the possibility that taking a blood sample from a limb in which a patient is receiving an infusion could affect the laboratory data.
- If examination results show abnormal values, staff will determine the need for treatment based on an assessment of the patient’s condition.

* As part of the Project to Collect Medical Near-Miss/Adverse Event Information (a Ministry of Health, Labour and Welfare grant project), this medical safety information was prepared based on the cases collected in the Project as well as on opinions of the “Comprehensive Evaluation Panel” to prevent the occurrence and recurrence of medical adverse events. See quarterly reports and annual reports posted on the Japan Council for Quality Health Care website for details of the Project.

<http://www.med-safe.jp/>

* Accuracy of information was ensured at the time of preparation but cannot be guaranteed in the future.

* This information is intended neither to limit the discretion of healthcare providers nor to impose certain obligations or responsibilities on them.



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