Evaluation of Arterial and capillary blood lactate in Coronary Artery Bypass Grafiting patients admitted to ICU in Imam Khomeini Hospital in Ardabil in 2018

Abstract:

Background: Individual capillary lactate assays have been shown to be associated with arterial lactate assays in patients admitted to emergency departments and ICUs. needed. This study aimed to compare arterial and capillary blood lactate in ICU patients undergoing CABG.

Materials and Methods: This was a descriptive cross-sectional study. Thirty-seven patients who underwent CABG surgery and were admitted to the ICU ward were considered as the sample. Arterial blood samples were taken from all of these patients to measure arterial lactate levels and capillary blood samples were taken to measure capillary lactate levels. After measurement, the capillary and arterial lactate levels of the patients were entered into the software. Data were analyzed using independent t-test, Pearson correlation coefficient, independent t-test and one-way ANOVA. SPSS23 software was used.

Results: Arterial and capillary lactate levels in CABG patients admitted to ICU ward of Ardabil hospital were above average and these levels were significantly correlated at 99% level. There was no significant relationship between age and sex of patients with arterial and capillary lactate levels.

Conclusion: The level of congruence between capillary and arterial values is not sufficient to suggest the use of capillary technique rather than arterial method, and the capillary procedure should be restricted to cases where arterial blood sampling is not possible or time consuming.

Keywords: Capillary Lactate - Arterial Lactate - Open Heart Surgery