

Analysis of ABO Discrepancies Occurring at a University Hospital, Al-khobar, Saudi Arabia

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Objective: To assess the incidence and causes of all ABO discrepancies.

Setting: The King Fahd Hospital of the University (KFHU), Al-Khobar in Eastern Saudi Arabia.

Design: Retrospective study.

Method: The study was performed between January 1992 to December 2005. ABO discrepancies were detected during routine blood bank laboratory testing by comparing either two current blood specimens or a current and historical specimen.

Result: Two hundred and sixty-one discrepancies were discovered in a series of 549,229 blood group tests performed during the study period, a frequency of 0.05%. The most common cause involved ABO subgroups, then errors of blood collection during phlebotomy that is collecting from a wrong patient and finally clerical errors during patient registration or identification.

Conclusion: ABO discrepancies can result from inaccuracy made by hospital staff during phlebotomy and collection of specimens, clerical errors and ABO subgroups. Technical errors are also a cause but none was found in this study. Careful techniques are needed to ensure proper collection and labeling of specimens during and after specimen collection to avoid any fatal complications. Repeat testing and investigation for ABO subgroups is very important.

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