This study is a pilot study evaluating the feasibility of sampling nose blood during an emergency using a commercially available rapid test device" Stadler and Soyka (2016).

Abstract:

OBJECTIVES/HYPOTHESIS: This study is a pilot study evaluating the feasibility of sampling nose blood during an emergency using a commercially available rapid test device. It also compares the accuracy of rapid nasal blood test results to the results of standard laboratory methods using venous blood sampling.

METHODS: Nose blood was collected in patients suffering from active epistaxis. In an emergency setting, hemoglobin levels and the international normalized ratio (INR) were assessed using a rapid point-of-care test device. These results were compared to standard laboratory analyses from venous blood taken at the same time from the same patient. Twenty patients consented to and participated in these assessments.

RESULTS: Linear regression comparing venous and nasal samples revealed strong correlations between the two methods for both hemoglobin and INR measurement. A Bland-Altman analysis showed the mean difference to be 2.3 g/L when comparing hemoglobin measurements made using the rapid point-of-care device to hemoglobin measurements made using conventional lab assessment. The corresponding mean difference for INR measurements was 0.14.

CONCLUSION: The results of this pilot study support the use of point-of-care test devices using nasal blood sampling and provide preliminary data demonstrating that a rapid testing method can be reliable, practicable, and time-efficient. In our opinion, rapid hematologic screening for nasal and capillary blood should be available in emergency wards that treat epistaxis.

Reference:

Stadler, R.R. and Soyka, M.B. (2016) A prospective pilot study comparing nasal blood sampling and venipuncture for the assessment of hemoglobin levels and INR. Laryngoscope. 2016 April 14th. .

doi: 10.1002/lary.26002.

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