Category :**IV fluids: amount**

A232 - ***Correlation of corrected carotid artery flow time with left ventricular outflow tract velocity time integral after mini fluid challenge for assessment of fluid responsiveness***

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Introduction:

Corrected carotid artery flow time (ccFT) assessed by ultrasound may be an attractive method for detecting fluid responsiveness in critically ill patients. However, it is not clear whether mini fluid challenge can induce changes in carotid flow measurements. In our study, we attempted to compare whether ccFT changes after mini fluid challenge and how it correlates with left ventricular outflow tract velocity time integral (LVOT VTI).

Methods:

The study involved 20 adult patients. Only patients who met all inclusion criteria were included. Patients with acute pancreatitis and any type of gastrointestinal bleeding were selected. Carotid artery flow time was measured by ultrasonography. ccFT was calculated using Wodey's formula. All measurements were taken before and after the mini fluid challenge with 100ml crystalloid fluid. LVOT VTI was measured automatically. The fluid responsiveness was defined as an increase of 10% in LVOT VTI. All examinations were performed by a single physician in the intensive care unit.

Results:

Among 20 patients, 12 (60 %) were fluid responders. The average change in carotid corrected flow time after mini fluid challenge for fluid responders was 14ms (±12ms). ccFT increase in 7ms was defined as fluid responsiveness with sensitivity 80 % and specificity 67%. The positive predicted value was 80.2 % and the negative predicted value was 66,8 %. The positive likelihood ratio was 2.40 (95% CI 0.46-13) and the negative likelihood ratio was 0.30 (95% CI 0.04-2.06). There was no significant difference between groups (pancreatitis vs gastrointestinal bleeding).

Conclusion:

ccFT may be useful test to predict fluid responsiveness among critically ill patients using mini fluid challenge test.