Comparative evaluation of subclavian vein catheterisation using supraclavicular versus infraclavicular approach

“The aim of the study was to compare the ease of catheterisation of SCV using SC versus IC approach and also record the incidence of complications related to either approach, if any.” Thakur et al (2014).

Reference:

Abstract:
BACKGROUND AND AIMS: Infraclavicular (IC) approach of subclavian vein (SCV) catheterisation is widely used as compared to supraclavicular (SC) approach. The aim of the study was to compare the ease of catheterisation of SCV using SC versus IC approach and also record the incidence of complications related to either approach, if any.

METHODS: In the study, 60 patients enrolled were randomly divided into two groups of 30 patients each. In Gp. SC right SCV catheterisation was performed using SC approach and in Gp. IC catheterisation was performed using IC approach. Access time, success rate of cannulation, number of attempts to cannulate vein, ease of guidewire and catheter insertion and length of catheter inserted and any associated complications were recorded.

RESULTS: The mean access time in group SC for SCV catheterisation was 4.30 ± 1.02 min compared to 6.07 ± 2.14 min in group IC. The overall success rate in catheterisation of the right SCV using SC approach (29 out of 30) was better as compared with group IC (27 out of 30) using IC approach. First attempt success in the SC group was 75.6% as compared with 59.25% in the IC group. All successful subclavian vein catheterisations in SC group and IC group were associated with smooth insertion of guidewire following subclavian venipuncture.
CONCLUSION: The SC approach of SCV catheterisation is comparable to IC approach in terms of landmarks accessibility, success rate and rate of complications.

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