

Right cardiac catheterization using a forearm vein: a feasibility test in Asian patients

Background and Objectives: Right heart catheterization is traditionally performed through the femoral vein. The femoral approach entails bed rest, risks of bleeding and hematoma, and admission. Recent studies showed that using the forearm vein for right cardiac catheterization is safe. Thus, we evaluated the feasibility of right cardiac catheterization via the forearm vein in Asian patients.

Materials and Methods: The medical records of all patients who underwent right heart catheterization at our hospital between January 2003 and December 2014 were reviewed retrospectively. Demographic data (age, sex, weight, height, and body mass index), indications for right cardiac catheterization, procedural and outcome data (initial success rate, procedure time, and complications) were recorded and used for comparison of right cardiac catheterization via the forearm vein and that via the femoral vein.

Results: We reviewed 132 cases (37: forearm vein approach, 95: femoral vein approach). Both groups had similar demographic data. The initial success rate (100% vs. 100%) and procedure time (21.6 minutes vs. 25.6 minutes, $P = 0.14$) were similar between the two groups. No complications were observed in both groups.

Conclusion: Right cardiac catheterization via the forearm vein was easily performed. Our study suggests that the forearm vein is an alternative access site for right cardiac catheterization in Korean patients.