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Letter to the Editor

Response to "Comment on the ESCORT Study: Atrial Fibrillation Detection by Pulse Checking Remains Challenging"

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We sincerely thank Dr. Kodani[1] for his insightful and constructive comments on our article, "Improvement in Atrial Fibrillation Detection by Pulse Checking of Patients with Non-Cardioembolic Stroke in Rehabilitation Hospitals: The ESCORT Study."[2] We greatly appreciate his careful interpretation of our results and his thoughtful discussion of the challenges associated with atrial fibrillation (AF) detection.

We fully agree that AF is a major cause of ischemic stroke and that early identification is essential for appropriate secondary prevention. As Dr. Kodani points out, short-duration pulse checks and single electrocardiographic recordings have limited sensitivity for detecting paroxysmal AF, whereas long-term monitoring with insertable or wearable devices is clearly superior. We also acknowledge that the relatively small sample size and limited in-hospital observation period in our study likely contributed to the absence of newly detected AF cases. Previous randomized trials have demonstrated that prolonged rhythm monitoring using insertable or external devices significantly increases AF detection compared with conventional short-term electrocardiographic monitoring[3,4]. Current guidelines therefore recommend extended ECG monitoring in patients with cryptogenic stroke[5].

However, the primary objective of the ESCORT study was not to demonstrate a high AF detection rate using pulse checks alone. Rather, our study was designed to increase awareness of the importance of AF detection among rehabilitation therapists and to evaluate the feasibility of implementing systematic pulse checks during routine rehabilitation practice. In Japan, recent advances in acute stroke treatment, including mechanical thrombectomy, have shortened the length of stay in stroke centers and increased early transfer to rehabilitation hospitals. Consequently, opportunities for intensive cardiac rhythm evaluation in the acute phase may be reduced, and AF detection is often not actively pursued in rehabilitation settings.

From this perspective, the ESCORT study aimed to address an important gap in daily clinical practice. Although no AF was detected, participating rehabilitation therapists successfully learned the significance of AF screening and the standardized method of pulse checking. We believe that this behavioral and educational impact represents a meaningful outcome of the study. Therefore, the negative result should not be interpreted as evidence that pulse checking is ineffective, but rather as a reflection of the inherent difficulty of detecting paroxysmal AF within a limited time frame using simple screening methods.

AF is increasingly prevalent in aging societies and may be regarded as a common or "national" disease in Japan. Enhancing awareness of AF detection among all healthcare professionals, including non-physician staff, is essential. Pulse checking is simple, inexpensive, and can be performed by anyone, anytime, and anywhere without special equipment. For these reasons, it remains a valuable first-line screening tool that can prompt further diagnostic evaluation when abnormalities are suspected. Opportunistic pulse palpation has been shown to improve AF detection and is recommended as an initial screening strategy in several consensus documents[6,7].

We agree with Dr. Kodani that extending observation periods and applying risk stratification strategies may improve AF detection in future studies. In addition, closer collaboration between stroke centers and rehabilitation hospitals—such as sharing information on patients at high risk for AF and combining pulse checks with periodic ECG examinations—may further improve detection rates.

In summary, although AF was not detected in our cohort, the ESCORT study demonstrates the feasibility of implementing regular pulse checks in rehabilitation hospitals and highlights the importance of promoting awareness of AF detection in these settings. Continued efforts to foster this awareness are necessary to improve long-term surveillance for AF and ultimately to reduce recurrent stroke.

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