Optimizing outcomes: adherence to the ABC (Atrial fibrillation Better Care) pathway in Asian atrial fibrillation patients with chronic kidney disease

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Atrial fibrillation (AF) is the most prevalent form of cardiac arrhythmia, representing a significant burden on both healthcare systems and public health.[1,2] It is associated with increased risks of mortality and morbidity, as well as with complications such as stroke, heart failure, and frequent hospitalizations.[1,2] Despite advances in the use of oral anticoagulants (OACs), many AF patients still suffer from multiple comorbidities, contributing to their high cardiovascular and all-cause mortality rates.[3] Consequently, recent clinical guidelines recommend a comprehensive treatment strategy beyond anticoagulation alone. This has led to the adoption of the ABC (Atrial Fibrillation Better Care) pathway in both European Society of Cardiology (ESC) and Korean guidelines.[4,5]

A major challenge in implementing integrated AF care is simplifying the approach to ensure that healthcare providers and patients alike can remember and apply it effectively across care settings—from primary care to hospitals. Studies have demonstrated that using the straightforward ABC pathway can significantly reduce adverse outcomes in AF patients, as shown in clinical trial subgroup analyses,[6] mid-sized prospective cohorts,[7] and nationwide population studies.[8]

Managing patients with both AF and chronic kidney disease (CKD) presents additional complexity due to shared risk factors and the potential for each condition to worsen the outcomes of the other. However, evidence on the effectiveness of the ABC pathway specifically in patients with both AF and CKD is still limited, particularly in Asian populations. Bucci et al. demonstrated the effectiveness of an integrated management approach in Asian patients with AF and CKD.[9] This study is significant for clinical scientists, as it found that CKD and adherence to the ABC pathway were independently associated with increased and reduced risks, respectively, of adverse composite outcomes. The risk of adverse events rose with greater CKD severity, yet the benefits of ABC pathway adherence remained consistent across all CKD stages. These findings highlight that the clinical complexity posed by CKD in AF patients can be effectively addressed through the ABC pathway.[9]

Current integrated approach for Asian AF patients with CKD

This study provides insight into the current clinical management patterns of OAC use among Asian patients with AF and CKD. It was found that individuals with CKD were less frequently prescribed anticoagulants, particularly direct oral anticoagulants (DOACs). This trend may reflect uncertainties surrounding guideline recommendations, concerns about kidney function, and the perceived risks of bleeding or reduced drug efficacy. Among patients who were prescribed OACs, non-vitamin K oral anticoagulants (NOACs) generally demonstrated better safety and efficacy outcomes compared to warfarin.[10] Although NOACs are preferred in AF treatment, their use in advanced CKD remains a topic of debate due to limited data. Careful monitoring is essential when prescribing DOACs to those with severe renal impairment.

In terms of symptom management (B in ABC), the CKD group showed lower rates of rhythm control. Contributing factors may include diminished response to anti-arrhythmic drugs, increased complication risks, the presence of multiple comorbidities, and a preference for rate control due to limited evidence in this subgroup. Overall adherence to the ABC pathway was lower among CKD patients than those without CKD. However, management of cardiovascular risks and comorbidities (C) appeared relatively consistent between the two groups.

This study lays the groundwork for future research, particularly well-designed, prospective randomized trials. While the findings are promising, they stem from retrospective analyses, which are subject to inherent biases and methodological limitations. Evaluating long-term outcomes, especially in non-valvular AF patients with diverse clinical backgrounds and therapeutic approaches, requires more rigorous methodologies.

There are unanswered questions from clinical research perspective in this study. Ordinarily, an epidemiological study design would include an initial exposure period, which begins immediately after the index diagnosis and is used to observe the effects of the exposure (such as a medication, intervention, or risk factor) on subsequent

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outcomes. This is typically followed by a washout period, a defined time interval during which no exposure occurs. The washout period is intended to eliminate any residual effects of the initial exposure, allowing for a clear assessment of the outcomes in a subsequent second exposure period or observation phase. This structure helps in distinguishing between short-term and long-term effects, and in minimizing carryover bias from previous exposures. It remains unclear whether this approach was used in the current study. Moreover, variations in OAC usage over time and patient adherence were not adequately captured. Additionally, some patients may have been excluded from integrated care due to contraindications or palliative care considerations.

Despite these limitations, the study supports the idea that adopting an integrated and patient-centered approach, such as the ABC pathway, enables more personalized and effective treatment planning—particularly when considering the interplay between cardiovascular therapies and renal function.[9]

Declaration of interests

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