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Editorial

Implementing clinical practice guidelines in the real world: a common-sense approach

Trasladando las guías de práctica clínica a la vida real, con sentido común

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Contemporary medicine, and cardiology in particular, are not exempt from the information overload and instant access to information prevailing in today's world, leading to ongoing controversies about its interpretation. This is becoming especially important in clinical practice guidelines. Considered a fundamental tool for optimizing patient care, these guidelines are based on systematic review of the available evidence at a specific moment in time, making them susceptible to quickly becoming outdated due to the continuous emergence of new evidence. Additionally, these documents may have limitations and knowledge gaps that are often filled with expert opinions rather than robust scientific evidence.

In recent years, the treatment of heart failure (HF) has advanced considerably with the introduction of new drugs, shown by various clinical trials to enhance survival and reduce morbidity in patients with HF with reduced ejection fraction (HFrEF). As a result, the current treatment strategy for HFrEF is based on a combination of 4 medication classes with demonstrated effectiveness in reducing hospitalizations for HF. These drugs act on 5 physiopathological pathways: renin-angiotensin system inhibition combined with stimulation of the natriuretic peptide pathway through neprilysin inhibition, beta-blockers, aldosterone receptor antagonists, and sodium-glucose cotransporter type 2 inhibitors.

Early optimization of medical treatment according to clinical practice guidelines for HFrEF is essential to reduce mortality, prevent hospitalization, and improve quality of life in these patients.[1,2]

Despite the considerable body of evidence supporting the benefits of HFrEF treatment, it is widely recognized that prescription practices in real-world clinical settings often fall short of the optimal approach. This trend has been demonstrated in several national registries. For instance, in the CHAMP-HF registry, only 1% of patients with HFrEF received the target dose of all the prescribed drugs.[3] This delay in starting treatment is even more pronounced with drugs that have been more recently incorporated into clinical practice guidelines, such as sodium-glucose cotransporter type 2 inhibitors and sacubitril/valsartan.[4]

Several reasons could explain this trend toward undertreatment, including information overload and a lack of familiarity with the guidelines, combined with daily inertia and fear of provoking decompensation in frail patients. In this regard, a post hoc analysis of the GUIDE-IT study showed a treatment optimization rate of less than 20% at 1 year of follow-up, with frailty being one of the main reasons for not providing patients with appropriate treatment.[5]

In addition to the new drugs added to treatment options, the way these drugs are initiated and prescribed has also evolved. In contrast to the traditional approach based on stepwise introduction of medications, one drug at a time, following the sequence in which these agents were developed for HF treatment, current clinical guidelines propose a horizontal strategy with early initiation of all 4 drugs with demonstrated benefits. However, this recommendation is not accompanied by specific directions on how these drugs should be introduced and up-titrated.

In a recent article published in *Revista Española de Cardiología*, Girerd et al.[6] propose a pragmatic and easily applied algorithm aimed at optimizing foundational treatment for patients with HFrEF, which meets the gap in guideline recommendations on this issue. Various recommendations had previously been published on this topic, such as the consensus document of the Heart Failure Association of the European Society of Cardiology, which proposed 9 clinical profiles based on heart rate, the presence of atrial fibrillation, systolic pressure, renal function, and/or the presence of hyperkalemia.[7] However, this proposal is more theoretical than practical and may not reflect the current reality in the process of drug initiation and up-titration, which in routine practice involves careful and personalized attention to the patient. Thus, the algorithm proposed by Girerd et al. stresses the importance of ensuring that treatment with the 4 medications is always initiated as early as possible, prioritizing the presence of all 4 medications over the doses used, and then up-titrating the treatment based on specific guidelines depending on the number of drugs used, blood pressure, and renal function, as well as whether the initiation occurs in the hospital or outpatient setting.[6] This approach aims to reduce the intervals between the introduction of different drugs and between different titration steps to achieve the complete treatment at maximal tolerated doses within a period of 2 months.

Although no algorithm can be so specific as to guide clinicians in all the particularities of each of our patients, Girerd et al. identify 2 populations that may require a more specific approach: elderly

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patients and those with cardiac rhythm disturbances. For the elderly, the emphasis is placed on the use of specific scales to assess the patient's frailty, and the study recommends slower and more controlled up-titrations with only 1 to 2 drugs at a time.[6]

HF represents a significant global public health problem due to its impact on patients' health and the economic burden it places on healthcare systems. The hospitalization period for HF and the immediate postdischarge phase are particularly vulnerable times characterized by a high risk of mortality and rehospitalization. There is a need for protocols for transition of care at discharge, focused on reducing this risk, and early patient follow-up is crucial to achieving optimal dosages of the quadruple therapy,[8] especially in higher-risk populations such as elderly and frail patients.[9] In this regard, Girerd et al. highlight a key aspect for implementing such protocols, specifically the organization of the HF patient care system, with a specific focus on the role of nursing.[6] Early follow-up provided by specialized nursing facilitates personalized care, titration, and adherence.[10]

While the proposal for treatment optimization is based on specific and easily applied guidelines, it is essential to remember that an individualized and stepwise approach is required for each patient. Common sense, regular assessment, and follow-up are crucial in initiating and titrating doses and adjusting drug regimens. In this setting, specialized HF units and nursing play a key role.

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