

専門科目 参考問題

- ・ 12 誘導心電図の肢誘導について説明しなさい。

英語 参考問題

- ・ 以下の英文を和訳しなさい。

It is estimated that half of all patients with heart failure (HF) have HF with preserved ejection fraction (HFpEF). Yet this form of HF remains a diagnostic and therapeutic challenge. Differentiating HFpEF from other causes of dyspnea may require advanced diagnostic methods, such as exercise echocardiography, invasive hemodynamics and investigations for 'HFpEF mimickers'. While the classification of HF has relied heavily on cut-points in left ventricular ejection fraction (LVEF), recent evidence points towards a gradual shift in underlying mechanisms, phenotypes and response to therapies as LVEF increases. For example, among patients with HF, the proportion of hospitalizations and deaths due to cardiac causes decreases as LVEF increases. Medication classes that are efficacious in HF with reduced ejection fraction (HFrEF) have been less so at higher LVEF ranges, decreasing the risk of HF hospitalization but not cardiovascular or all-cause death in HFpEF. These observations reflect the burden of non-cardiac comorbidities as LVEF increases and highlight the complex pathophysiological mechanisms, both cardiac and non-cardiac, underpinning HFpEF. Treatment with sodium-glucose cotransporter 2 inhibitors reduces the risk of composite cardiovascular events, driven by a reduction in HF hospitalizations; renin-angiotensin-aldosterone blockers and angiotensin-neprilysin inhibitors result in smaller reductions in HF hospitalizations among patients with HFpEF. Comprehensive management of HFpEF includes exercise as well as treatment of risk factors and comorbidities. Classification based on phenotypes may facilitate a more targeted approach to treatment than LVEF categorization, which sets arbitrary cut-points when LVEF is a continuum. This narrative review summarizes the pathophysiology, diagnosis, classification and management of patients with HFpEF.