

Semaglutide: An emerging treatment option for patients with obesity related HFpEFSanya Ashraf Khaskheli¹, Najaf Ahmed Rajpar²

Dear Madam, Heart failure is a key contributor to patient morbidity and mortality and affects a staggering 64 million individuals around the globe.¹ An important sub-phenotype of heart failure is HFpEF, which is characterised by a left ventricular ejection fraction (LVEF) of ≥ 50 per-cent. Alarming, the incidence of this subtype has been rising globally, making the need for new treatment options extremely crucial.² Initially, the use of Semaglutide, a glucagon-like peptide-1 receptor agonist, showed favourable outcomes in cardiac function of mice. This study observed that weight loss achieved using Semaglutide was met with improvements in several factors associated with HFpEF (reduced LV hypertrophy and fibrosis, improved diastolic function, reduced lung congestion and improved exercise capacity) as compared to weight loss achieved through simple dietary means.³ A step further in this direction is a clinical trial that shows that a weekly dosage of 2.4mg of Semaglutide in obesity related HFpEF patients is associated with significantly reduced symptoms and physical limitations, improved exercise function and greater weight loss than placebo.⁴ Of the several parameters observed, improvements in CSS (Clinical Survey Score) of KCCQ (Kansas City Cardiomyopathy Questionnaire) and six minute walking distance were the most clinically meaningful. These promising findings are of particular value to Pakistani population, which has been prey to obesity and HF owing to Westernised eating habits, sedentary lifestyles and fewer healthcare facilities. In addition, South Asians have more fat content per BMI as

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compared to their white counterparts which coupled with the rising trends in NCD risks in South Asia⁵ are an immediate call for innovation in therapeutics. Semaglutide, considering its array of cardiometabolic benefits, may provide our doctors with a chance to step away from prescribing long lists of medications that are conventionally given to HF patients for symptom improvement. In a low-income country like Pakistan, this will ensure a better drug compliance and reduced disease burden. It is high time that we tap into the potential of Semaglutide and test its efficacy of it in our native population and take strides in ensuring its easy availability.

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SAK: Conceived and design, data analysis, interpretation and writing.

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