Thus, S/V may be beneficial in carefully selected LVAD patients, especially hypertensive LVAD patients. The increase in serum potassium we observed was not significant and hyperkalemia was not seen and no patient discontinued S/V due to hyperkalemia. Initiation of S/V showed no significant difference in NT-proBNP levels at 9 months (p=0.262). Some retrospective single center studies have also shown no hyperkalemia and reduction in NT-proBNP with S/V with LVADs. The lack of change to slight increase in NT-proBNP levels in contrast to the reduction seen in other retrospective studies may be due to the longer follow up of patients in our cohort. It may also be that NT-proBNP levels have an initial drop but over a longer period of follow up the NT-proBNP are not different from baseline. We also found tolerability of S/V to parallel the major S/V LIFE trial with discontinuation rate of 17% compared to 18% in the LIFE trial. Our study adds to the growing evidence of the safety and tolerability of S/V in patients with durable LVAD support.

This study has limitations. It is a single center and retrospective analysis with a small sample size hence may be underpowered to detect a significant difference. However, our paper represents the longest patient follow up of 9 months for LVAD patients on S/V when compared to recent studies (<3 months).

Conclusion

In our cohort of patients on LVAD support, S/V was overall well tolerated with a drop-out rate due to intolerance (hypotension, renal dysfunction) of 17%. The patients, who stayed on S/V for at least 9 months, had a significant increase in serum creatinine. In the whole cohort, no significant changes in blood pressure, serum potassium or NT-proBNP occurred. However, in patients with higher baseline creatinine, MAP decreased significantly, but remained within normal range. It appears that S/V is overall safe in this patient population. Prospective controlled studies are needed to establish the efficacy of S/V in patients on LVAD support and to compare them with the existent options of ACE or ARBs.

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*Correspondence to

Abdulrahman Nazif

Department of Medicine,

Indiana University,

Indianapolis,

Indiana,

United States

E-mail: *anazif@iu.edu*