Abstract: P1663

Outpatient inotrope administration in advanced heart failure patients: a single centre experience.

Authors:
J Curtain¹, E Kavanagh¹, C Howley¹, C Tracey¹, C Halley¹, J O’Neill¹, NG Mahon¹, ¹Mater Misericordiae University Hospital - Dublin - Ireland,

On behalf: N/A

Topic(s):
Chronic Heart Failure: Pharmacotherapy

Citation:

Funding Acknowledgements:
N/A

Background:

Inotropic agents are used in the treatment of advanced heart failure patients. Inotrope dependency is one of the indications for cardiac transplantation. Inotropes may have side effects, including arrhythmia and hypotension, so their use is mostly restricted to specialist units. Transplant candidate patients often have prolonged coronary care unit (CCU) admissions receiving inotropes. Opportunities for outpatient leave may provide psychological support for long-term inpatients.

Aim:

We assessed the feasibility and safety of outpatient administration of inotropes in patients in a cardiac transplant centre.

Methods:

A retrospective analysis of advanced heart failure patient records from 2010 – 2018 was conducted. Data was obtained on the type and dose of inotrope and diuretics used, venous access, right heart catheterisation (RHC) results, history of implantable cardiac defibrillator (ICD), renal function, blood pressure, heart rate, duration of outpatient leave, time from admission until first outpatient leave, time from admission until transplant or left ventricular assist device (LVAD), patient’s county of residence and complications during outpatient leave.

Results:

5 patients received outpatient inotropes. 3 patients received milirone, 1 patient received dobutamine. 1 patient received both milirone and dobutamine at different stages during their admission. All patients had PICC line central venous access with pump devices for drug administration. All patients had an ICD. Mean time until first outpatient leave from admission was 66 days (17-150). Mean time on inotropes to transplant or LVAD was 418 days (375-489). Mean blood pressure was 100/60 mmHg (90-122 / 56–79). Mean heart rate was 78 bpm (64–90). Mean cardiac output was 4.2L/min (3.6-4.7). Mean pulmonary capillary wedge pressure was 12mmHg (7-24). 2 patients received outpatient inotropes while on full weekend leave. 2 patients were administered inotropes during day leave. 1 patient was discharged home on dobutamine as part of a palliative care process. 3 patients lived in Dublin.

No changes to inotrope or diuretic therapy were made within one week of outpatient leave. No changes to therapy were made following the most recent RHC prior to outpatient leave. A planned dobutamine weaning process had been started in the palliative care patient prior to discharge. One patient had an unscheduled return
to CCU for a PICC line occlusion. All 4 transplant candidate patients had anticipated leave postponed for clinical reasons. One patient had documented non-sustained ventricular tachycardia in the week prior to leave. No ICD therapies were documented during the outpatient periods. Improvement in mood was documented following a leave period in all returning patients.

Conclusions:

Outpatient inotrope administration can be safely provided to selected patients, in diverse settings, including as bridge to transplant or as part of an end-stage palliative process.