Utilization of Guideline Directed Medical Therapy in Heart Failure Patient with Reduced Ejection Fraction Upon Discharge

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ABSTRACT

Background: Heart failure (HF) is a complex clinical syndrome that results from any structural or functional impairment of ventricular filling or ejection of blood. Guideline directed medical therapy (GDMT) is the mainstay of pharmacological therapy for HFrEF in the absence of any contraindications or intolerance. Few studies have evaluated the frequency of initiating or discontinuing GDMT in hospitalized HF patients. The aim of the study was to observe the modification patterns of GDMT in hospitalized patients with HF*r*EF and investigate the patient characteristics, comorbidities, and exam the laboratory findings that predicted the initiation or discontinuation of GDMT. **Methods:** A retrospective observational study was performed for all adult patient with HF*r*EF who were hospitalized from January 2016 until June 2017. The medication for each patient was recorded at two points in time: directly after admission to hospital and upon discharge. The primary endpoint was the modification of GDMT in hospitalized heart HF patients upon discharge. **Results:** Among 260 patients, 142 were analyzed. The mean age was 61±15 years and 70% were male. 71% were admitted as case of ADHF, 58% had IHD, 72% were hypertensive patients, and 23% had sever reduced EF (<20%). A class III NYHA functional classification was observed in 50% of patients. Modification of GDMT occurred in up to 23% of cases. There was an increased in the prescription rate of ACEIs/ARBs between admission and discharge (54% vs. 70%), whereas Beta-blockers and spironolactone prescriptions also increased (65.5% vs. 91.5% and 25% vs. 39%, respectively). The digoxin prescriptions rate remaining the same between admission and upon discharge (7% vs. 7.7%). **Conclusion:** Despite the well-established role of GDMT for chronic HF management, many hospitalized patients with HF are discharged in suboptimal GDMT. The study will further investigate the predictors and the outcomes associated with GDMT modification.