Appropriate Management of Drug Interactions Results in Safe Use of Hepatitis C Therapies in Heart Transplant Recipients

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Relevant Financial Relationship Disclosure Statement

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This presentation will discuss the off label and/or investigational use of pharmacotherapy related to hepatitis C in heart transplant recipients.

There are no relevant financial relationships to disclose related to this presentation.

Methods and Patient Characteristics

Retrospective Chart Review

N=25 heart transplant recipients who completed DAA therapy for HCV

HCV Treatment initiated:

Mean 67 days post transplant

Treatment Duration

12 weeks for 24 patients, 24 weeks for 1 patient

Immunosuppression

Tacrolimus (n=21)

Mycophenolate mofetil

Corticosteroids

Tacrolimus Dose and Levels by DAA Regimen Throughout HCV Treatment

DAA Regimen	Mean total daily FK dose (mg/day)		Mean FK level (ng/mL)	
	Baseline vs 4 weeks	Baseline vs completion	Baseline vs 4 weeks	Baseline vs completion
Ledipasvir/Sofosbuvir, (n=15)	6.9 vs 6.5	6.9 vs 6.1	10.2 vs 10	10.2 vs 8.8
Velpatasvir/Sofosbuvir, (n=5)	7.7 vs 6.5	7.7 vs 5.9	9.5 vs 9.8	9.5 vs 8.6
Glecaprevir/Pibrentasvir, (n=1)	4 vs 3	4 vs 3	10.4 vs 8.7	10.4 vs 6.8

Description of Interacting Medications used with DAA Therapy

Statin	Incidence of Use (n=24)
Pravastatin 20mg	50%
Atorvastatin 10mg	33%
Rosuvastatin 5mg	8%
Pravastatin 10mg	4%
Simvastatin 20mg	4%

Other	Incidence of Use (n=25)
Amiodarone (stopped prior to therapy initiation)	8%

Acid Suppressant	Incidence of Use (n=24)
Omeprazole 20mg	38%
Famotidine 40mg	17%
Famotidine 20mg	12.5%
Ranitidine 150mg	12.5%
Pantoprazole 40mg	8%
Pantoprazole 20mg	8%
Esomeprazole 20mg	4%

Incidence of Patient-Reported Side Effects related to DAA Therapy

Side Effect	Incidence (n=25)
Headache	44%
Fatigue	40%
Gastrointestinal	40%
Myopathy	16%
None	24%
Bradycardia	0%

Conclusions

- Appropriate management of drug interactions can help lead to successful treatment of HCV in cardiac transplant recipients
- No empiric dose adjustments seem to be necessary when starting standard DAA therapy post cardiac transplant
- Side effects from DAAs are common but are generally mild and manageable