

Rapid Transition from Oral Selexipag to Subcutaneous Treprostinil in Pulmonary Arterial Hypertension.

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Background: Treatment for pulmonary arterial hypertension (PAH) traditionally include the nitric oxide pathway, endothelin receptor antagonism, and prostacyclin analogs. Oftentimes, patients with PAH have severe features at diagnosis and require prostacyclin therapy, which traditionally had only been available in parenteral or inhaled formulations. Now with oral formulations available, clinical scenarios may occur where transitioning from one form to another may be necessary. Very little literature exists about how to successfully transition between different formulations of prostacyclin therapies and may necessitate inpatient care. We present our experience with a rapid 48-hour transition from selexipag to subcutaneous treprostinil in a patient with idiopathic PAH.

Methods: A 29-year female with a history of idiopathic PAH initially presented with progressive chest pain and dyspnea with NYHA Class III symptoms in January of 2018. Due to her significant symptoms and profoundly deranged hemodynamics, she was placed on triple therapy inclusive of selexipag 1600 mcg BID, macitentan 10 mg daily and riociguat 2.5 mg TID. With this therapy, her symptoms improved initially to NYHA Class I, functional status improved with improvement in her 6MWT to over 1000 feet and hemodynamic parameters improved from pulmonary vascular resistance (PVR) of 15 to 4.2 Woods units and mean pulmonary artery pressures (mPA) from 50 to 38 mmHg. However, over the next 6 months, her symptoms progressively worsened again to NYHA Class III symptoms correlating with a decline in hemodynamics with a rise in her PVR to 9 Woods units and a drop in her cardiac output from 6.5 to 4.7 L/min.

Results: With a need for subcutaneous prostacyclin therapy, she was observed in the hospital in a cardiac telemetry bed for 48 hours and underwent a rapid transition from selexipag to IV treprostinil. Patient's goal for IV prostacyclin dose was 40 ng based on total selexipag dose. Patient was rapidly transitioned with an increase in 4 ng every 12 hours of IV treprostinil with 200 ng decrease. She tolerated the transition well without any side effects and returned home on subcutaneous treprostinil with continued uptitration to goal dose of 40 ng/kg/min. Post transition, both her symptoms and 6MWT improved significantly.

Conclusions: There are limited case reports that illustrate and describe safety and tolerability of rapid transition of oral selexipag to treprostinil. Our patient tolerated the transition with ease in terms of tolerability along with improvement in symptoms from PAH.