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Navigating Transitions: IV Epoprostenol to oral Treprostinil

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Navigating Transitions: IV Epoprostenol to oral Treprostinil

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Background

- Historically IV prostacyclins were the only treatment option indicated for the pulmonary hypertension (PH) patient population.
- Central lines carry risks for infection, sepsis, line fractures, and pain at the insertion site which are associated with patient's reporting a reduced quality of life.
- Oral prostacyclins offer an optimal treatment plan with improved quality of life.
- There is a lack of clinical trials to support the transition from IV to oral therapies.

Purpose

- This case study details the transition from an IV Epoprostenol to oral Treprostinil over a seven week period.

Case Description

- A 54 y/o female with severe PAH, WHO group 1, NYHA class III.

•Tx:

– PDE-5

–type-A selective endothelin receptor antagonist,

–IV Epoprostenol x 4 yrs

•S/E:

–flushing

–sinus congestion

–GI upset, generalized edema

–shortness of breath

–headaches

•C/O:

–central catheter discomfort

–depression

–poor quality of life

Transition Schedule Table

Medication	Prostacyclin	Total	Epoprostenol
Week 1 (05/23/2016)	Dose: 0.125mg po TID (use 1 tab of 0.125mg TID/daily)	0.375mg/day	18ng/kg/min
Week 2 (05/30/2016)	Dose: 0.5mg po TID (use 2 tabs of 0.25mg TID for a total of 6 tabs/daily)	1.5mg/day	14ng/kg/min
Week 3 (06/06/2016)	Dose : 1mg po TID (use 4 tabs of 0.25mg TID for a total 12 tabs/daily)	3mg/day	10ng/kg/min
Week 4 06/13/2016)	Dose: 2mg po TID (use 2 tablets of 1mg TID for a total of 6 tabs/daily)	6mg/day	6ng/kg/min
Week 5 (06/20/2016)	Dose: morning 3.5mg (use 2.5mg tab + 1mg tab) noon 3.0mg (use 2.5mg tab + 0.5mg tab) evening 3.5mg (use 2.5mg + 1mg tab)	10mg/day	3 ng/kg/min
Week 6 (06/27/2016)	Dose: morning 4mg (use 2.5mg tab + 1mg tab + 0.25tab + 0.25mg tab) noon 4mg (use 2.5mg tab + 1mg tab + 0.25mg tab + 0.25mg tab) evening 4.5mg (use 2.5mg tab + 2 tabs of 1mg)	12.5mg/day	1.5ng/kg/min
Week 7 (07/04/2016)	Dose: morning 4mg (use 2.5mg tab + 1mg tab + 2 tablets of 0.25mg) noon 5mg (use 2 tabs of 2.5mg) evening 5mg (use 2 tabs of 2.5mg)	14mg/day	Stop infusion

Methods

- A comprehensive plan of care was developed by a multidisciplinary healthcare team.
- Weekly transitions were closely monitored by the cardiologist and the Outpatient Pulmonary Hypertension Clinic staff.
- The patient's mental and physical well being was evaluated and documented during the seven week period.

Results

- The patient was successfully transitioned from IV to oral therapy with no adverse events or functional decline.
- The patient reported having an improved quality of life and was able to resume swimming and other hobbies that had been contraindicated when IV therapy was initiated.

Improved Quality of Life!

Implications for Practice

- Patients meeting certain criteria can safely be transitioned from IV to oral prostacylins.
- Reduction of infection due to central line removal.
- Reduced risk of abrupt discontinuation of treatment due to central line/pump malfunction.
- Improved quality of life
- Delivering more cost effective care by reducing the need for pump maintenance

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