National Community Oncology Dispensing Association, Inc.
PASSION FOR PATIENTS

Written By: Latha Radhakrishnan, PharmD, BCPS, BCOP
University of Illinois Hospital and Health Sciences System
Updated 12/31/2019

Positive Quality Intervention: Granisetron Transdermal System For Chemotherapy Induced Nausea and Vomiting (CINV)

Description of PQI:
The Granisetron Transdermal System (Sustol®) is a 5-HT3 Receptor Antagonist (5-HT3 RA) that allows for an alternate medication delivery compared to oral or parenteral administration. The purpose of this PQI is to review appropriate patient identification and discuss clinical considerations for the use of granisetron.

Background:
The Granisetron Transdermal System is approved for the prevention of nausea and vomiting in patients receiving moderately and/or highly emetogenic chemotherapy (MEC and/or HEC) for up to 5 consecutive days[1]. Current practice guideline include granisetron transdermal system/patch as a 5-HT3 RA option for use in the prevention of acute and delayed intravenous MEC and HEC chemotherapy. It is also a choice in high to moderate chemotherapy emesis prevention[2]. The pharmacokinetic profile of the formulation reveals continuous delivery of granisetron through the skin for over 6 days[3].

PQI Process:
Based on clinical practice experience, *consider* using the granisetron transdermal system in the following patient situations:

a. Moderate to highly emetogenic multi-day chemotherapy
b. Difficulty swallowing tablets due to oral mucositis, tumor location, vomiting, etc.
c. Combination radiation + chemotherapy (head and neck regimens, etc.)
d. No intravenous access
e. Limited gut motility and absorption due to opioids or tumor location
f. Difficulty remembering to take oral medications
g. Refractory nausea and vomiting despite receiving appropriate preventative anti-emetics
    - Place patch on patients on the last day of multi-day intravenous chemotherapy

Upon receipt of an order for granisetron transdermal system:

- Ensure appropriateness of use in either MEC/HEC intravenous or high to moderate oral chemotherapy
- Check start date of chemotherapy cycle
    - Apply 1 patch (3.1mg) 24-48 hours on clean, dry, intact skin on the upper outer arm prior to the start of c hemotherapy to the upper arm (do not cut)
    - Wear throughout chemotherapy treatment up to 7 days total
    - Remove at least 1 day (24 hours) after chemotherapy completed

Written By: Latha Radhakrishnan, PharmD, BCPS, BCOP
University of Illinois Hospital and Health Sciences System
Updated 12/31/2019

PQI Process Continued:

- Discuss the use of surgical bandages or medical adhesive tape at the edges of the transdermal system to keep it in place
- Provide a prescription for a rescue medication (i.e. prochlorperazine, metoclopramide, etc.) to assist with breakthrough nausea and vomiting. Other 5-HT3 RA such as ondansetron should not be used as rescue medications to avoid QT prolongation, constipation, and headache.

Patient Centered Activities:

- Application Instructions
  - Ensure that patients understand where to apply the patch
  - Educate on avoiding sunlight and heating sources (heating pads, tanning beds)
- Patient Education
  - Review common side effects which include constipation and headache
    - Constipation – provide recommendations for a stimulant laxative (bisacodyl, sennosides, etc.) PLUS a stool softener
  - Explain when to apply and remove the patch – a calendar would assist
  - Remind to keep patch area covered under clothing and for another 10 days after the patch is removed to avoid potential skin reactions from natural or artificial sunlight

Financial Assistance

- Patient Rx Solutions (https://www.patientrxsolutions.com or 1-800-676-5884)
  - Coverage option for uninsured patients
  - Co-pay Assistance Cards
  - Sancuso Patch Replacement Program – If chemotherapy is delayed or reschedule

References:

1. Sancuso [package insert, Bedminster, NJ: ProStrakan, Inc.; 2015.
2. National Comprehensive Cancer Network. Antiemesis (Version 3.2018). https://www.nccn.org/professionals/physician_gls/pdf/antiemesis.pdf Accessed January 3, 2018.
3. Howell J, Smeets J, Drenth H, et al. Pharmacokinetics of a granisetron transdermal system for the treatment of chemotherapy-induced nausea and vomiting. *J Oncol Pharm Practice*. 2009; 15: 223 – 231.
4. Boccia RV, Gordan LN, Clark G et al. Efficacy and tolerability of transdermal granisetron for the control of chemotherapy-induced nausea and vomiting associated with moderately and highly emetogenic multi-day chemotherapy: a randomized, double-blind, phase III study. *Support Care Cancer*. 2011; 19: 1609-1617.