IREDELL HEALTH SYSTEM

Metformin in Patients Receiving Iodinated IV Contrast	
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P&T Committee	Date: 06/2021

Purpose:
To prevent administration of metformin to patients with potentially abnormal renal function related to injection of Iodinated IV Contrast.

Supportive Data:
According to the manufacturer of Glucophage, metformin is recommended to be temporarily discontinued at the time of or before iodinated contrast imaging procedures in a patients with an eGFR 30 to 60 mL/minute/1.73 m^2; or with a history of hepatic disease, alcoholism, or heart failure. This practice is due to an increased risk of acute renal failure and subsequent lactic acidosis.

Policy:
Patients who are taking metformin, or combination products containing metformin, and will receive Iodinated IV Contrast will be evaluated and have the metformin-containing product placed on hold for 48 hours unless otherwise ordered by physician, according to what is outlined in this policy.

Procedure:

- **For Emergency room patients receiving Iodinated IV Contrast:**
  Prior to a procedure/diagnostic test, the staff (Radiologic Technologist, Cardiac Cath Lab RN/Technologist) in the area administering the contrast will screen the patient to determine if the patient is taking metformin or combination products containing metformin. If the patient is taking one of these medications, the screener will provide written instructions for holding metformin for 48 hours after the administration of the iodinated contrast. The ED staff is to review this information with the patient prior to discharge.

- **For Acute Care patients, including an OB/GYN patient or a patient on HBSNF receiving Iodinated IV contrast:**
  Prior to administering IV Iodinated Contrast, the staff (Radiologic Technologist, Cardiac Cath Lab RN/Technologist will screen the patient to determine if the patient is taking metformin or combination products containing metformin. If the patient is identified to meet this criteria, the following items shall take place:
    1. Screening staff to enter a *Pharmacy Communication Order* within Cerner stating "Patient received iodinated contrast and is with active metformin order. Evaluate need to hold metformin per policy."
    2. Upon receipt of this communication, pharmacist is to evaluate the patient and shall hold metformin if the any of the following is met:
        a. eGFR $\leq$ 60 mL/minute/1.73 m^2; or
        b. History of hepatic disease, alcoholism, or heart failure; or
        c. Who will receive intra-arterial iodinated contrast.
    3. Following 48 hours of receiving IV Iodinated Contrast and holding of metformin, pharmacist will obtain a Basic Metabolic Panel to evaluate the re-start of metformin. If patient's renal function is within the appropriate dosing recommendation, the pharmacist

may restart metformin as the initial ordered dose. If the previous dose is no longer appropriate, the pharmacist should contact the provider for further orders.

INITIAL EFFECTIVE DATE:
DATES REVISIONS EFFECTIVE: 06/2017, 04/2018, 08/2021
DATES REVIEWED (no changes):