



**NEPHROLOGY PROGRAM
DEPARTMENT POLICIES AND PROCEDURES**

**Home Dialysis - Section 09 - Peritoneal Dialysis - HDU 9-15
Extraneal (Icodextrin) Prescription Policy
No.: 01476 (TOH Standardized Policy Number)**

ISSUED BY:

Home Dialysis Unit Clinical Practice
Committee

DATE OF APPROVAL:

2010/09

APPROVED BY:

Program Clinical Director and Division
Head

LAST REVIEW/REVISION DATE:

2015/04

CATEGORY:

Peritoneal Dialysis

IMPLEMENTATION DATE:

2010/09

POLICY STATEMENT:

- To list all of the actions required by the nephrology medical and nursing staff to protect the patient from inaccurate blood glucose readings when a patient is prescribed Extraneal (Icodextrin) dialysate.

BACKGROUND STATEMENT:

- Extraneal (Icodextrin) is indicated for use once in 24 hours as an osmotic agent for long dwells in CAPD and CCPD patients. It may dwell for up to 16 hours
- Extraneal(Icodextrin) contains Maltose which can interfere with GDH PQQ (glucose dehydrogenase pyrroloquinolinequinone) or GDO (glucose-dye- oxidoreductase) and some GDHFAD (glucose dehydrogenase flavin-adenine dinucleotide) based glucose checking methods resulting in inaccurate blood glucose measurement
- As a result, Extraneal (Icodextrin) may cause a false high glucose reading from glucose meters or POCT testing devices that use GDH PQQ, GDO or some GDHFAD based methods. This could lead to serious insulin dosage errors such as the administration of an excessive dose of insulin leading to severe hypoglycemia. This could also result in missed and untreated hypoglycaemic episode
- Plasma levels of Extraneal (Icodextrin) and its metabolites return to baseline within 14 days following cessation of Extraneal (Icodextrin) administration. Patients will continue to have false high readings if using a glucometer not compatible with Extraneal

DEFINITION(S): N/A

ALERTS: N/A

PROCEDURE

1. The nephrologist prescribes Extraneal (Icodextrin) and HDU nurse explains to the patient:
 - The osmotic agent benefits of the product
 - Extraneal may cause a false high glucose reading with a glucometer that use GDH PQQ, GDO or some GDHFAD based methods, which could result in the administration of more Insulin than needed or untreated hypoglycemia
 - Patient receiving Extraneal must use glucose meter and test strips that are compatible with Extraneal to avoid inaccurate results

2. The nurse that processes the Extraneal order ensures the following is completed:
 - All patients are provided with the HDU approved glucose metre (i.e. Onetouch) that is compatible with Extraneal solution, and show the patient how to use the new meter
 - apart from exception: consult with endocrinology APN for information on complex case management such as patient on insulin pump to verify the patient's own glucose meter and test strips at home is compatible with Extraneal
 - advises patient to keep the appropriate blood glucose meter with them at all times
 - HDU nurse will teach patient:
 - If patient comes to The Ottawa Hospital (TOH), can use the Roche Accu-Chek Inform II blood glucose meter at TOH as it is compatible with Extraneal solution
 - If patient go to other health care facilities, it is advised that patient should bring own blood glucose meter that has been verified to be compatible with Extraneal solution by HDU nurses
 - Patient receives an “Important Information about Extraneal” package from Baxter Corporation
 - Patient is informed to educate their family and/or friends about using the meters that has been verified by HDU
 - If a patient prefers to use their previous blood glucose meter after cessation of Extraneal(Icodextrin) therapy, the patient is advised to wait for 14 days as falsely elevated glucose levels may be measured up to two weeks following cessation of Extraneal(Icodextrin) therapy when GDH-PQQ,GDO, and GDH-FAD-based blood glucose monitors and test strips are used

DOCUMENTATION:

1. The Extraneal order, the teaching and all related actions are documented in NephroCare

RELATED POLICIES / LEGISLATION: N/A

REFERENCES:

1. Baxter Important Information about Extraneal package, retrieved from:
http://www.baxter.com/downloads/healthcare_professionals/products/extraneal_iri.pdf
2. PRODUCT MONOGRAPH EXTRANEAL* (December, 2014), retrieved from:
http://www.glucozesafety.com/ca/en/downloads/Extraneal_PM_2014Dec05_EN.pdf
3. Country-Specific Glucose Monitor List (October, 2014), retrieved from:
http://www.glucozesafety.com/ca/en/downloads/Country_Specific_Glucose_Monitor_List_en_102014.pdf

COMMENTS / SIGNIFICANT REVISIONS: N/A