Chronic Maintenance In-Center Standing Orders - Doxercalciferol

Doxercalciferol (ICD10 – N25.81)

1. **Targets**   iPTH 150 – 600 pg/ml
   Calcium ≤ 10.2 mg/dl

2. **Labs:**
   a. Draw monthly calcium (in NKC Profile) unless otherwise indicated below.
   b. Draw iPTH quarterly (Jan-Apr-Jul-Oct) unless otherwise indicated below.
   c. Draw labs with the routine monthly lab draws unless otherwise indicated below.
   d. If monthly calcium >10.2, redraw calcium in 1 week (maximum 3 draws per month).
   e. If calcium >10.5, notify physician for guidance on management.

3. **Dosing:**
   a. Give doxercalciferol doses IV, 3x/week with dialysis. If patient dialyzes >3x/week, ensure doses are spaced evenly 3x/week throughout the week. If patient runs only 1 or 2 times per week administer the dose with each dialysis i.e. qweek or 2x/week, respectively.
   b. Always use the most recent calcium and iPTH when applying algorithms.
   c. If the algorithm indicates to increase the doxercalciferol dose to ≥8 mcg, contact nephrologist for instructions.
   d. If the algorithm indicates to decrease the doxercalciferol dose to <1mcg, hold doxercalciferol dose

4. **Incident Patient Algorithm:**
   a. Incident patient = patient new to dialysis or established patient who has not received any paricalcitol or doxercalciferol within past 6 months.
   b. Do not start doxercalciferol if calcium >9.8, monitor calcium monthly
   c. If calcium is ≤9.8 give doxercalciferol at the dose indicated in Table 1 and draw next iPTH in one month.

Table 1: Incident Patient Doxercalciferol Dosing	
iPTH (pg/ml)	**Dose** (mcg)
<300	0
300 – 450	1
>450 – 600	2
>600	3

   d. Once doxercalciferol started and result on next iPTH draw known, proceed per Established Patient Algorithm below.

Patient Name_____   **NKC#** _____

5. Established Patient Algorithm

a. If calcium ≥10.2 mg/dl, hold doxercalciferol dose

b. If calcium <10.2 mg/dl, determine doxercalciferol dose using the iPTH brackets in Table 2 and the following algorithm.

Table 2: Established Patient iPTH Brackets	
iPTH (pg/ml)	**Bracket**
< 150	A
150 – 450	B
>450– 600	C
>600	D

c. Change current doxercalciferol dose based on most recent iPTH result compared to the prior iPTH result:

   i. Hold dose if iPTH is in bracket (A)

   ii. 1 mcg increase if patient switched from iPTH bracket (B) to bracket (C) or from bracket (C) to bracket (D) or patient remains in bracket (D)

   iii. 2 mcg increase if patient had two or more iPTH bracket increase

   iv. 1 mcg decrease if patient switched from iPTH bracket (D) to bracket (C) or from bracket (C) to bracket (B)

   v. 2 mcg decrease if patient had two or more iPTH bracket decrease, unless patient switches to bracket (A), in which case hold dose

   vi. In all other cases keep existing dose

d. If a doxercalciferol dose change is made, or if dose is ≥8 mcg, recheck iPTH in 1 month.

6. Held Dose Algorithm (for established patients)

a. If doxercalciferol dose on hold, and most recent calcium <10.0 mg/dl AND iPTH >300 pg/ml, then manage doxercalciferol using the following algorithm:

   i. Restart with 2mcg dose decrease if iPTH >300 pg/mL and in bracket (B) (i.e. iPTH >300 to 450 pg/mL)

   ii. Restart with 1 mcg dose decrease from previous dose if in bracket (C)

   iii. Restart with the same dose if in bracket (D)

b. When Doxercalciferol restarted after a hold, recheck iPTH in 1 month

c. If doxercalciferol on hold, and most recent calcium is ≥10.0mg/dl AND iPTH >600 pg/ml, contact nephrologist to suggest starting or increasing cinacalcet

7. Conversion from paricalcitol to doxercalciferol

a. When a patient with a paricalcitol order switches to doxercalciferol, discontinue paricalcitol order

Patient Name_____ **NKC#** _____

b. Convert paricalcitol to appropriate dose of doxercalciferol per conversion dose chart below. Convert to doxercalciferol when the next paricalcitol dose is due.

c. If paricalcitol is on HOLD per held dose algorithm, hold doxercalciferol and apply held dose algorithm

d. For paricalcitol doses other than those listed in the table below, use a doxercalciferol dose of 50% of the paricalcitol dose, rounded up to the nearest 1 mcg

e. Check PTH with monthly labs on the month following conversion from paricalcitol to doxercalciferol.

Paricalcitol to Doxercalciferol Dose Conversion Chart	
Paricalcitol dose, mcg	Doxercalciferol dose, mcg
1	1
2	1
3	2
4	2
5	3
6	3
8	4
10	5
12	6
14	7

Matthew Rivara, MD
Physician Name (Please Print)

_____   _____
Physician Signature   Date
(***see Initial Orders***)

Patient Name_____**NKC#** _____