

Kayexalate/Kionex (sodium polystyrene sulfonate)

INDICATION: Hyperkalemia

Hyperkalemia is abnormally high levels of potassium in the blood (Serum K⁺ > 5.0mmol/L). Slightly elevated levels of serum potassium may not cause any symptoms but severe hyperkalemia can lead to heart rhythm abnormalities, which can be fatal.

CAUSES:

Conditions such as – CKD, CHF, diabetes

Medications such as –

- Beta blockers (atenolol, propranolol etc.)
- Calcium channel blockers (amlodipine, verapamil, etc.)
- NSAIDs (naproxen, ibuprofen etc.)
- ACE inhibitors (Lisinopril, etc.)
- ARBs (losartan, valsartan, etc.)
- Diuretics (furosemide, spironolactone, etc.)
- Bactrim

HOW SUPPLIED:

- 15g/60mL suspension, 454g powder for suspension

DAILY DOSING:

- 60ml of suspension by mouth 1-4 times a day **or**
- 15 grams (4 TBSP) powder for suspension dissolved in 20-100ml fluid

ADMINISTRATION:

FDA Warning – administer 3 hours before and 3 hours after ALL OTHER orally administered medications to decrease Kayexalate binding of oral drugs

CONTRAINDICATIONS:

- NOT indicated for the urgent treatment of severe hyperkalemia
- GI obstruction/obstructive bowel disease
- Hypokalemia
- Administration of potassium salts

SIDE EFFECTS:

- GI – bowel necrosis, obstruction, perforation, Nausea/vomiting
- Hypokalemia, hypomagnesemia, hypocalcemia

DRUG INTERACTIONS: Potassium salts are contraindicated (including sorbital, glucosamine/chondroitin, citric acid, iodine, etc.)

USE IN SPECIFIC POPULATIONS: no dosage adjustment required

<https://hubnet.buffalo.edu:2067/pharmacology/monograph/497?n=Kayexalate>

http://www.heart.org/HEARTORG/Conditions/HeartFailure/TreatmentOptionsForHeartFailure/Hyperkalemia-High-Potassium_UCM_488806_Article.jsp#.WfHCbow7lfQ

Ben Salem, C., Badreddine, A., Fathallah, N. et al. Drug Saf (2014) 37: 677. <https://doi.org/10.1007/s40264-014-0196-1>



Show What You Know

1. T/F – Kayexalate is used for the treatment of hypokalemia
2. Which medication is contraindicated with Kayexalate?
 - a. Klor-Con
 - b. Aspirin
 - c. Metformin
 - d. Ferrous sulfate
3. How long should I wait before and after giving Kayexalate to administer another medication?
 - a. 4 hours
 - b. 3 hours
 - c. 1 hour
 - d. You don't have to wait
4. T/F – Kayexalate is used in the urgent treatment of severe hyperkalemia

How Did You Do?

1. False

Kayexalate is used for the treatment of Hyperkalemia. Hyperkalemia is abnormally high levels of potassium in the blood (Serum K+ > 5.0mmol/L). Slightly elevated levels of serum potassium may not cause any symptoms but severe hyperkalemia can lead to heart rhythm abnormalities, which can be fatal.

2. a. Klor-Con

Potassium salts are contraindicated
(including sorbital, glucosamine/chondroitin, citric acid, iodine, etc.)

3. b. 3 hours

FDA Warning – administer 3 hours before and 3 hours after ALL OTHER orally administered medications to decrease Kayexalate binding of oral drugs

4. False

Kayexalate is NOT indicated for the urgent treatment of severe hyperkalemia