Water soluble vitamin deficiency in patients with renal failure receiving dialysis-management

Recommendation

Renavit has been approved as the preferred preparation for patients with renal failure who are receiving dialysis through East Kent Hospital Foundation Trust (EKHUFT)

Patients from EKHUFT currently receiving Dialyvit or Ketovite will be reviewed and changed to Renavit by as part of their regular review by EKHUFT.

.

Renavit – Water soluble vitamins

- Renavit should be as an alternative to Dialyvit or Ketovite for the management of water soluble vitamin deficiency in patients with renal failure receiving dialysis.
- Renavit has a slightly different formulation but this is not significant.
- Renavit is the most cost effective licensed product of the three available
- Renavit can be stored at room temperature

Background:
The Renal Association guidelines on Nutrition in Chronic Kidney Disease (CKD) recommend that patients receiving dialysis should receive supplements of water soluble vitamins.(1) Data from the Dialysis Outcome and Practice Patterns Study (DOPPS) shows that supplements of water soluble vitamins were not widely prescribed in UK units. However they were associated with significantly lower mortality rates at patient and institution level. They are inexpensive and present a low risk of toxicity, so we advise that their use should be more widespread.(2)

On 20th May 2013 EKHUFT Medicines Management Group approved Renavit use as first line choice having determined that the difference in formulation between Renavit and Dialyvit was trivial. The Trust identified that the substitution should enter the Trust Medicines Savings plan, but should also be coordinated with East Kent CCGs Medicines Management.

New products:
There is now an Advisory Council for Borderline Substances (ACBS) approved supplement for the management of water soluble vitamin deficiency in renal failure patients receiving dialysis. Renavit® will be included in Part XV of the drug tariff, and can therefore be prescribed both in hospital and in the community.

Current Use (Patient numbers extracted from Renal Plus):

	Dialyvit®	Ketovite®
Current patient numbers	102	12
Est. Cost per year (based on prices above)	£7,330	£606.49
Est. Cost if switch to Renavit®	£4,635.90	545.4
Est. Saving	£2,694.10	£60.60

Approved by: East Kent Prescribing Group *(Representing Ashford CCG, Canterbury and Coastal CCG, South Kent Coast CCG and Thanet CCG)*
Date: July 2013
Address: c/o *Canterbury and Coastal CCG, Brook House, John Wilson Business Park, Whitstable, CT5 3DD*
Contact: T: 01227 791267 | E: accg.eastkentprescribing@nhs.net

Table comparing the current products available for the management of water soluble vitamin deficiency in Dialysis patients and Renavit®

Constituents per tablet	Dialyvit®	Ketovite®	Renavit®
Ascorbic Acid	60mg	16.6mg	120mg
Biotin	300mcg	170mcg	300mcg
Calcium Pantothenate	10mg	1.16mg	10mg
Cyanocobalamin/cobalamin	6mcg	-	6mcg
Folic Acid	800mcg	250mcg	1mg
Niacin	20mg	3.3mg	20mg
Pyridoxine	10mg	330mcg	10mg
Riboflavin	1.7mg	1mg	1.7mg
Thiamine	1.5mg	1mg	3mg
Alpha tocopheryl acetate	-	5mg	-
Inositol	-	50mg	-
acetomenaphtone	-	500mcg	-
Dosing	0ne daily	Three daily	One daily
Storage requirements	Room temp	Fridge	Room temp
Cost for 1 month treatment (30days)	£5.93 (Varies in community due to unlicenced status)	£4.17	£3.75
Licensed in UK	No	yes	Yes (FSMP)

Summary:
From the above information Renavit® will provide a saving to the health economy. The size of the health economy saving will more than likely be greater due to the variability in charges occurring due to the unlicensed status of Dialyvit® with in the UK. Its reduced dosing frequency and the fact it can be stored at room temperature also make it a preferable substitution to Ketovite®.

Prepared by:
Medicines Information/Renal Pharmacist EKHUFT

References

1:The UK Renal Association. Guideline on Nutrition in CKD. June 2010.

2:Fissell RB, Bragg-Gresham JL, Gillespie BW, Goodkin DA, Bommer J, Saito A, Akiba T, Port FK, Young EW. International variation in vitamin prescription and association with mortality in the Dialysis Outcomes and Practice Patterns Study (DOPPS). American Journal of Kidney Disease 2004; 44(2):293-299

Approved by: East Kent Prescribing Group *(Representing Ashford CCG, Canterbury and Coastal CCG, South Kent Coast CCG and Thanet CCG)*
Date: July 2013
Address: c/o *Canterbury and Coastal CCG, Brook House, John Wilson Business Park, Whitstable, CT5 3DD*
Contact: T: 01227 791267 | E: accg.eastkentprescribing@nhs.net