

An audit of phosphate binder and Cinacalcet wastage in a haemodialysis population

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Background:

Phosphate binders and Cinacalcet are commonly used to control biochemistry and complications of CKD-MBD in end stage renal disease. However, due to factors such as pill burden, size and side effects, concordance with these tablets can be a challenge. Some of these medicines are expensive and despite prior counselling with patients by showing actual tablets, discussing how to take and common side effects, it has been noted that drug wastage is common. The base hospital pharmacy was contacted to request an initial smaller supply but was unable to issue due to limitations of the medication packaging stipulating to store medication in original container. This audit was conducted to establish the cost wastage of these tablets.

Method:

All new prescriptions for phosphate binders and Cinacalcet were recorded in 7 of our haemodialysis units, for a 6 month period (May 2019 – Nov 2019). Information was collected if patients continued or whether they discontinued the new medication. The number of tablets prescribed to the patient and the amount taken before they were discontinued was documented so that wastage costs could be calculated. Cost per tablet was calculated using the drug tariff price.

Results:

86 new prescriptions of phosphate binders or Cinacalcet were commenced in the 6 months of the audit period. Of the 86 prescriptions issued, 11 were discontinued by patients. The medications discontinued were Velphoro, Cinacalcet, Fosrenol and Renvela. The number of new prescriptions issued for these medications were 15, 13, 9, 9 respectively. Three (33%) were discontinued by patients for Velphoro, 6 (40%) for Cinacalcet, 3 (23%), 1 (11%) for Fosrenol and 1 (11%) for Renvela. The two medications most commonly discontinued are both prescribed from the base hospital, and not by General Practitioners. The most commonly cited reasons were side effects and taste. The cost of the estimated wastage was £3253.38.

Conclusion:

This audit concludes that many patients prescribed phosphate binders and Cinacalcet discontinue these medications soon after the first supply is received due to reported side effects. With the smallest volume of prescription available for issue being 28 days, large number of tablets are wasted and this results in a substantial wastage costs. This seems particularly relevant as the Renal Association is no longer advocating calcium phosphate binders as the 1st line treatment so there may be an increase in more expensive non-calcium containing phosphate binders being prescribed. Having access to smaller initial volume of prescribed phosphate binders and Cinacalcet to assess tolerance and palatability, it is proposed, could contribute significantly to cost saving in prescriptions of these items. This needs further investigating to assess whether small supplies could be prescribed via pharmacy.