**The effect of changing from hospital to home haemodialysis on nutrition parameters: a pilot**

**Introduction**. There is limited and conflicting evidence in nutritional parameters following transition from hospital haemodialysis (HH) to home based haemodialysis (HHD) (Galland et al 2001; Rocco 2013; Ipema et al 2016). The aim of this service evaluation was to identify any changes in nutritional parameters in patients who transferred from HH to HHD.

**Methods.** This was a multicentre pilot service evaluation (Birmingham, Nottingham, Oxford) between June and November 2017. This aimed to collect both retrospective (6 months prior starting HHD) and prospective nutritional data (anthropometry, bone management, dietary phosphate advice and information on patients’ experience), demographics and number of hours of haemodialysis in 15 patients selected at random.

**Results.** Data was collected for 11 patients (3m, 8f), 3 patients refused to participate. Median age was 51 (30-71). Average hours of HHD were 15.8hours a week (compared to 12 hours a week in HH). Length of time on HHD was 38 (19-76) months. There was no significant difference in BMI (p=0.35), calcium (p= 0.058), phosphate (p=0.40). There was a non-significant negative relationship between the phosphate levels and the number of hours of HHD (r= -0.45, p = 0.161). Parathyroid hormone (PTH) reduced significantly from 371 +/- 435ng/l to 196+/- 170ng/l (p = 0.045) and albumin increased significantly from 33.7+/- 3.8g/l to 40.6 +/- 2.3 (p = 0.048). There was a reduction from 11 (HH) to 9 (HHD) patients needing to follow a low phosphate diet and the requirement of calcium containing phosphate binders. Alfacalcidol therapy reduced from 8 to 7 patients and Cinacalcet therapy remained the same. All 11 patients reported HHD gave them more freedom with their fluid intake and a five with their diet.

**Key conclusion**. Although a small cohort, this pilot suggests that patients on HHD have a significantly improved PTH and albumin level, reduction of pill burden and more freedom with their diet and fluid intake. The next step is to repeat this service evaluation at a national level with a larger number of patients.