An evaluation of a nurse led Tolvaptan (Jinarc) service for the treatment of Autosomal Dominant Polycystic Kidney Disease (ADPKD) in a UK district general hospital.

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INTRODUCTION: Tolvaptan (Jinarc) is a drug that was approved by National Institute of Health and Care Excellence (NICE) in 2015 specifically for the treatment of Autosomal Dominant Polycystic Kidney Disease (ADPKD). Tolvaptan is a vasopressin receptor antagonist which is used to attenuate the progression of kidney disease, delaying the need for dialysis or transplantation. The Trust covers a predominantly rural population and patients were travelling a considerable distance to neighbouring hospitals to receive such treatment. It was therefore recognised by the renal department within our Trust that there was a clear need for a Tolvaptan service to be delivered locally. In 2018, the renal department within our Trust launched a new nurse led service providing Tolvaptan for ADPKD patients living within our locality. We describe how our service operates along with an evaluation of the patient’s biochemical outcomes.

METHOD: With the support of our pharmacy department, local Clinical Commissioning Group (CCG) and other hospitals with an established Tolvaptan service, we successfully obtained approval for an independent nurse led service to be developed. Patients who meet the criteria for Tolvaptan are referred to the service and jointly discussed with the renal specialist nurse and the renal consultant. The patient is then contacted by telephone and offered an appointment to receive education in relation to taking this drug. A trust based patient education leaflet is posted to the patient prior to this appointment. Once the patient has consented to treatment, Tolvaptan is prescribed by the renal specialist nurse prior to the clinic visit and prepared by the pharmacy department for patients to collect on the day of their clinic visit. Patients routinely attend monthly clinic visits until they are stable on treatment. Patients are advised to have their blood tests taken at specific times and the results are appraised by the renal specialist nurse. The necessary dose adjustments of Tolvaptan are then made and further prescriptions issued. Following stabilisation of treatment patients blood tests continue to be monitored on a monthly basis and the results are discussed with the patients during a telephone consultation.

RESULTS: Following commencement of the service in April 2018 to present day, a total of 7 patients have received Tolvaptan. Results are illustrated in the attached table and graph.

CONCLUSION: A nurse led Tolvaptan service for ADPKD patients was successfully designed and implemented in our hospital. All 7 patients have shown improvement or stabilisation of their glomerular filtration rate (GFR) following the introduction of this drug. None of the patients have experienced or reported any harmful adverse effects of taking the drug. No patients have discontinued treatment and all are concordant with blood test monitoring and telephone consultation discussions at the specified time. We recognise that education in primary and secondary care is needed to capture additional patients who may not be known to the renal team who would potentially benefit from Tolvaptan treatment.