

RETROSPECTIVE SURVEY OF VASCULAR ACCESS PROVISION FOR PATIENTS STARTING ON HAEMODIALYSIS AT BIRMINGHAM HEARTLANDS HOSPITAL IN 2007

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INTRODUCTION: Arteriovenous fistula (AVF) is the preferred form of vascular access for haemodialysis due to its lower infection risk and better long term dialysis performance compared to dialysis catheter [1, 4]. Nevertheless, the Dialysis Outcomes and Practice Patterns Study (DOPPS) published in 2002 undoubtedly illustrated the need of improvement in UK renal vascular access provision as we have the lowest incidence and prevalence of AVF access use compared to other European countries [DOPPS].

National Kidney Foundation 2006 advocated early planning for renal failure [2]. Renal Association Clinical Practice Guidelines 2007 aim for least 65% of patients presenting more than 3 months before initiation of dialysis to have usable AVF upon starting haemodialysis and expect all patients on dialysis, including those patients who present late, to wait no more than 4 weeks for AVF construction.

AIMS: Our audit aims to examine the service provision of vascular access for patients starting on haemodialysis in 2007 against the current renal association clinical practice standards and to compare the outcome with previous local audit results in 2001 and 2004.

METHODS: This was a retrospective study of all patients who first commenced on haemodialysis from 1st January 2007 to 31st December 2007 using electronic hospital records and the renal database.

RESULTS: There were 82 patients identified, mean age 62.3 +/- 16.8 year-old. Male to female ratio was 1.7:1. The average eGFR on commencement of haemodialysis was 8.4 +/- 3.1. 70% of patients received first haemodialysis via AVF, compared to 59% and 64% in 2001 and 2004, respectively. 3 months after the initiation of the haemodialysis, 14% of the patients were still receiving haemodialysis via non-AVF access. 59% of the patients who did not have AVF access on first haemodialysis waited longer than 4 weeks for AVF construction. The average waiting time for AVF formation was 2 ½ months.

CONCLUSION: There was marked improvement of vascular access service provision from 2001 to 2007. The introduction of renal vascular access specialist nurse in 2003 played a crucial role in this achievement. On the other hand, we failed to achieve the waiting time target of 4 weeks for AVF formation. This resulted in a significant proportion of patients with established end-stage renal failure remained on dialysis catheter 3 months after their first haemodialysis session. This audit outcome prompted the urgent need for expansion of AVF formation surgery capacity. It also concluded the importance of the role of dedicated specialist nurse service and recommended the maintenance or increment of the number of vascular access specialist nurses for the unit.