

2012 were included in the audit. Data was collected via the RRT database and Retrieval referral forms.

Results Over twenty months NWTs received 1637 referrals from 29 District General Hospitals in the region out of which 20 patients (1.22%) were severe DKA. 6/20 were newly diagnosed DKA.

At time of referral 10/20 were noted to have significantly reduced GCS, requiring hypertonic saline and an urgent CT scan.

Following advice from NWTs, only 7 were transferred to PICU and rest were managed in their local DGH; each followed up for a period of 24–48 hours with minimum of two follow-up calls.

3 out of 7 transferred to PICU had very low level of consciousness (GCS 3–4/15); the rest had intercurrent illness e.g. sepsis, myocarditis and non availability of HDU beds.

All patients survived and only one patient (who also had problems with severe tachyarrhythmia and associated poor cardiac output) had evidence of neurological injury.

Conclusion With advice and support the local DGH team can be guided through the management of severe DKA including those with reduced GCS, with good outcome.

The DGH clinicians value the support available from Regional Retrieval Team as many are unfamiliar with management of such rare situations.

The majority of patients did not require transfer to tertiary centres which benefited both the patient and family and allows best utilisation of resources.

G62(P) RETROSPECTIVE ANALYSIS OF PICU READMISSIONS OVER A ONE YEAR PERIOD

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Aims Readmission may suggest premature discharge and may be detrimental to the patient's care. Our aim was to determine our PICU readmission rate and review the patterns of readmission.

Methods A retrospective case series analysis was performed. Patients with multiple admissions during September 2010 to August 2011 were identified using the computerised information system, CIS.

Patients who had been discharged home or had an elective readmission were excluded. The CIS and hospital case notes of the patients were analysed using standard proformas.

Information recorded included readmission reason, length of stay, time from discharge to readmission, CEWS scores prior to discharge from PICU and intervention required in PICU (figures 1, 2, 3).

Results 39 patients were readmitted which represents a readmission rate of 3.8%. 10 patients were readmitted within 24 hours of discharge (26%), 14 were readmitted within 3 days (36%) and the remainder between 4 and 7 days. Average time of readmission was 60 hrs (mean) with a range of 3 hrs to 168 hours.

The majority (23–60%) of the patients were readmitted with respiratory distress. 3 patients were readmitted with cardiac failure. 4 patients were readmitted with life threatening events (10%)

The majority of patients were cardiac (52%).

The majority of patients had a CEW score of 0 prior to discharge.

Almost half of the patients (46%) readmitted required ventilation, 12 required inotropic support. The rest required observation only.

9 patients were readmitted for less than 24 hours (23%), 10 (25%) patients for between 1 and 3 days and 20 (51%) for more than 3 days. The longest readmission was 73 days, median 202 hours.

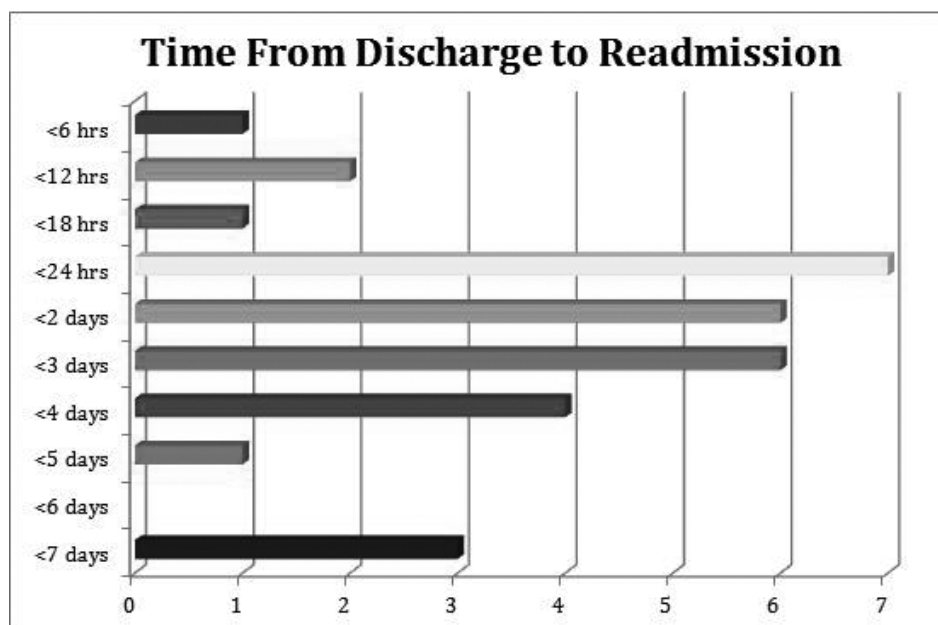
Conclusion A readmission rate of 3.8% is within the accepted norm although there is a lack of paediatric data.

Most of our patients were readmitted with respiratory distress usually caused by the same condition necessitating initial admission. The majority of our readmissions occurred within 72 hours. The patients that did not require ventilation had a generally short admission (mean 38 hrs). There was a large group, however, who required a lot of intervention and had a prolonged second admission. We did not identify any clear avoidable risk factors for readmission.

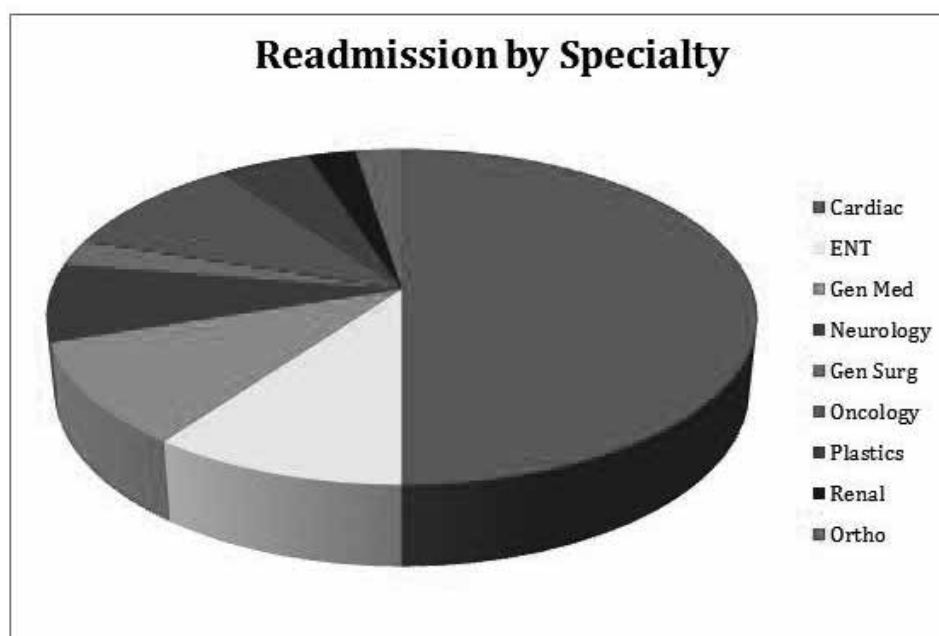
G63(P) INVESTIGATION OF FAMILIAL VESICO-URETERIC REFLUX IN INFANTS, IS IT WORTHWHILE?

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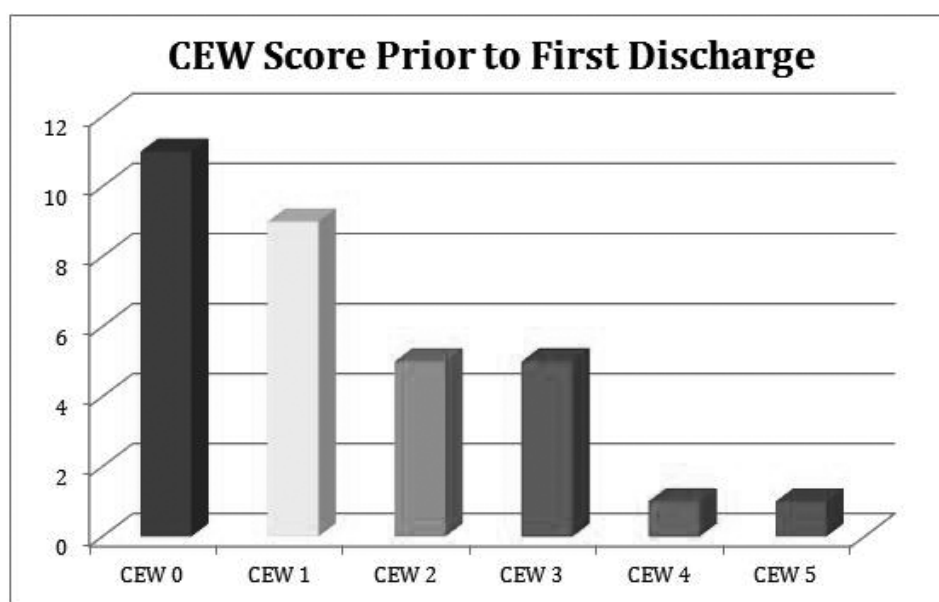
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Abstract G62 Figure 1



Abstract G62 Figure 2



Abstract G62 Figure 3

Aims Vesico-ureteric reflux (VUR) is known to be familial and inherited, but screening of asymptomatic individuals is controversial. In our centre families with an index case with proven VUR or evidence of reflux nephropathy (RN) on imaging, are counselled about the hereditary nature and given information about possible clinical problems associated with VUR. They are offered screening of newborn and infant first-degree relatives by contrast micturating cystourethrogram (MCUG). The aim of this audit was to look at the outcome of screening infants by contrast MCUG from data collected over 10 years from one hospital.

Methods The reports of all MCUGs on under one year olds performed during the last 10 years were reviewed. All MCUGs had been reported or verified by a consultant radiologist. We obtained information from reports and electronic letters and used these to ascertain those MCUGs done for screening purposes; obtain results; and determine clinical outcomes where possible.

Results 203 MCUGs out of a total 1738 were done for the investigation of familial VUR or reflux nephropathy. A further 2 were requested but not done. 39 cases with VUR were found.

Abstract G63 Table 1

Grade of Reflux	Number of cases n = 39
1	2 (5%)
2	25 (64%)
3	8 (21%)
4	4 (10%)

Abstract G63 Table 2

VUR	Number of cases n = 39
Bilateral	26 (67%)
Right	6 (15%)
Left	7 (18%)

We had discharged 5 children (13%); in 4 of these VUR has been demonstrated to have resolved; and 34 (87%) are currently being followed up. Of these, 2 have scarring with recurrent UTIs and 1 has a scarred kidney but VUR has resolved.

Conclusion 19% of asymptomatic infants screened for VUR because of a positive family history of VUR or RN have themselves got VUR, with the majority (67%) having bilateral VUR. By identifying these cases resources and education are targeted to those families to encourage rapid diagnosis and treatment of UTIs with the ultimate aim of preventing scarring.

G64(P) CO-CREATING A CO-ORDINATED COMPLEX CARE PLAN TO IMPLEMENT IN A PAEDIATRIC RENAL SERVICE

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Aim NHS Kidney Care commissioned project to develop and implement a patient/family held care plan to be created by service users and multi-agency staff.

This project aimed to review existing documentation with staff and service users and co-design a care plan, to improve co-ordination of care across agencies and standardise access to education and information resources. Promotion of self-management and partnership working with parents, carers and young people was central to this.

Methods A Review, Agree, Implement and Demonstrate (RAID) model was used to develop and trial the care plans. Mixed methods were used to obtain qualitative data in the review and agree stages. Professionals and service users were invited to engage via questionnaires, interviews and co-creation events.

Results participation data

Abstract G64 Table 1

Method	Families: Number offered	Families: Number participating	Professionals: Number offered	Professionals: Number participating
Questionnaire	76	34 (44%)	84	32 (46%)
Co-creation event and interviews	34	10 (29%)	32	13(41%)

Questionnaire results indicated that 58% of families are using some form of hand held record created for themselves.

A draught care plan was co-created by attendees at the focus group and interviewees. They then undertook a review and an amended care plan was collaboratively developed. The resulting care plan is transportable for use in a variety of settings. It is designed to encourage the patient and family to be active participants in care planning, and suitable for use from childhood through

to young adulthood. The trial of the draught care plan is in progress with 20 patients and the multi-agency teams working with these children/young people. The utility and value of the care plan will be assessed after a minimum of 3 months use. A further review will be undertaken prior to full implementation

Conclusion This project has demonstrated the willingness of families and professionals from health, social and education services to participate in a co-creation project. This has allowed us to develop draught documentation designed to support the health, education and social development of children with complex renal disease.

G65(P) UNILATERAL HYPOPLASTIC KIDNEY – A NOVEL AND HIGHLY PENETRANT FEATURE OF FAMILIAL JUVENILE HYPERURICAEMIC NEPHROPATHY

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Aim To highlight an interesting and novel renal phenotype that may provide an insight into the genetics surrounding the development of isolated renal hypoplasia.

Methods A sixteen year old boy was referred to Paediatric Nephrology services following concerns of a strong family history of renal disease. Both his mother and maternal aunt have end stage renal disease. Two of his maternal cousins were found to have chronic kidney disease. All affected members had evidence of hyperuricaemia. The patient's grandparents and maternal uncles were not affected. Renal ultrasounds performed on affected family members revealed unilateral renal hypoplasia in the index case, as well as his mother and aunt.

Results Our case report describes a pedigree with familial juvenile hyperuricaemic nephropathy, a relatively uncommon condition characterised by hypoxcretion of urate leading to hyperuricaemia, gout and progressive renal impairment. This family, however, require our attention for several reasons. Firstly, three affected family members demonstrate unilateral renal hypoplasia inherited in an autosomal dominant manner: to our knowledge this is the first report to describe such a phenotype. Secondly, two affected cousins had normal sized kidneys, suggesting a modifier gene effect, and lastly affected members have tested negative for mutations in two of the major genes implicated in FJHN, which have also been linked to a role in renal morphogenesis: uromodulin (*UMOD*) and hepatocyte nuclear factor 1 β (*HNF1 β*).

Conclusion Isolated renal hypoplasia is a common congenital anomaly for which a gene association has never been found. The presence of this phenotype in an autosomal dominant manner in this pedigree is therefore of great potential importance, for the ability to identify for the first time a gene responsible for unilateral renal hypoplasia. The association here with renal failure and hyperuricaemia is fascinating, and may provide novel developmental insights linking tubular development, control of lateral renal maturation and renal size. We discuss the known genetics surrounding renal embryogenesis and the implications our pedigree may have for further understanding of this common developmental anomaly.

G66(P) TO DETERMINE THE ACCURACY OF PHASE CONTRAST MICROSCOPY IN PREDICTING URINE CULTURE RESULTS

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