

GP289 KIDNEY INVOLVEMENT IN TUBEROUS SCLEROSIS COMPLEX

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Purpose Tuberous sclerosis complex (TSC) is an inherited neurocutaneous disorder that is characterized by pleomorphic features involving many organ systems. Renal manifestations are the second most significant cause of morbidity and mortality in patients with tuberous sclerosis complex (TSC), and include renal cysts, angiomyolipomas (AMLs) and malignant tumors. In this study, we investigated patients with tuberous sclerosis in our clinic for renal involvement.

Methods In our clinic, the renal manifestations of children with TSC between 0–18 years of age were evaluated. Age of the first diagnosis, TSC history of family, renal ultrasonography findings of angiomyolipomas and cysts such as size, quantity, location, renal function tests, urinalysis, presence of hypertension, additional organ involvement, and the presence of renal cell carcinoma were assessed.

Results There were 17 (8 male and 9 female) patients with TSC. The mean age of the patients was 11.6 years and first diagnosis time was 2,3 years. Angiomyolipoma was the most frequent lesion (15 of 17 patients) and twelve of them were bilateral. At the time of diagnosis 3 patients had angiomyolipomas. The sizes of AMLs of the patients were smaller than 5cm. Six patients had also renal cysts and 2 of them with renal cysts had no AML. Additional organ involvement was observed in 3 patients. All of the patients had normal renal function tests and urinalysis.

Conclusion The most common renal lesions in TSC are angiomyolipomas and kidney cysts. At the time of TSC diagnosis, all the children must be screened for renal involvement and changing of renal findings in TSC with time should not be forgotten since the new findings can be added to old ones.

GP290 CAN WE RELY ON PYURIA TO DIAGNOSE URINARY TRACT INFECTION IN CHILDREN?

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Urinary Tract Infections (UTI) occurs in up to 7% of febrile infants and young children (1). The most common uropathogen is *Escherichia coli* (E.coli) (2). Presence of pyuria (≥ 10 white blood cells per cubic millimetre (≥ 10 WBC/mm³) on urinalysis is essential to diagnose UTI (2). We set out to examine whether there is a link between the absence of pyuria and a positive urine culture for a known uropathogen.

This was a retrospective cohort study of 248 patients admitted with symptomatic UTI between January 2015 and December 2016. Mean (SD) age was 31.27 (42.54) months and 101 (40.7%) patients were male. Of 248 patients with UTI, *E. coli* was documented as the causative pathogen in 221 cases (89.1%), *Klebsiella* species in 8 (3.2%), *Proteus* species in 8 (3.2%), *Pseudomonas* species in 7 (2.8%), *Enterococcus* species in 3 (1.2%) and Group B streptococcus in 1 (0.4%). All patients with UTI due to *E.coli* infection exhibited

> 10 WBC/mm³ on urinalysis (p value 0.001). However, in those with UTI caused by non-*E.coli* uropathogens, < 10 WBC/mm³ on urinalysis was documented in two of eight (25%) patients with UTI secondary to *Proteus* infection, two of eight (25%) individuals with *Klebsiella* UTI, one of seven (14.3%) patients with UTI due to *Pseudomonas* infection and one of three (33.3%) patients with UTI caused by *Enterococcus* species.

In conclusion, 9 in 10 patients with UTI experienced *E.coli* uropathogen on urine culture. Pyuria with > 10 WBC/mm³ on urinalysis was documented in all patients with *E.coli* uropathogen. However approximately one fifth of patients with UTI due to non-*E.Coli* uropathogens experienced absence of pyuria on urinalysis. Considering the possibility of absence of pyuria in those with UTI due to non-*E.coli* uropathogens, using reliable adjunctive biomarkers in diagnosis UTI while waiting urine culture need to be explored through further research.

REFERENCES

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GP291 AUDIT OF THE IRISH NATIONAL CENTRE FOR PAEDIATRIC RHEUMATOLOGY NEW PATIENT WAITING LIST

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Introduction Juvenile idiopathic Arthritis (JIA) is the most common inflammatory disorder of childhood. Early recognition and optimal treatment of JIA is associated with reduced mortality and morbidity. Wait times for new patients to be reviewed by paediatric rheumatologists in Ireland are significantly outside the Standards of Care for children and young people with JIA (2010). These recommend that patients with suspected JIA be seen by a paediatric rheumatologist within 42 days of the referral being made.

Advanced practice physiotherapist (APP) provided triage clinics have successfully reduced waiting lists and provided intermediate care pathways for patients who do not necessarily require rheumatologist review (Stanhope *et al.*, 2012). This service model may be an option to manage waiting lists.

New referrals to the paediatric rheumatology are triaged by rheumatologists based on the information provided in the paper referral as 'urgent', 'soon' and 'routine' as per clinical indications. Those referrals categorised as urgent require consultant review, however it may be possible for referrals in the 'routine' and 'soon' categories to be reviewed by an APP.

Method The active waiting list for new referrals categorised as 'soon' and 'routine' were audited in July 2018 to identify the characteristics of referrals and determine the number of referrals that would be appropriate for an APP clinic. Referrals for a musculoskeletal (MSK) presentation were deemed appropriate for APP clinic where;

- it appears likely to be a non-inflammatory source of the MSK issue;
- is it was not clear from the paper referral whether an inflammatory joint condition is the source of MSK issue;