Data pertaining to duration of dialysis at presentation, duration of follow up, estimated GFR at follow up, proteinuria, blood pressure percentile, dialysis requirement and transplantation was collected. Additional information pertaining to mortality and co-morbidities were also collected. Information on pneumococcal serotype in post 2007 cases [following PCV vaccine introduction in UK] was also collected. Research protocols were approved by regional governance teams.

Results Long-term outcome data was available for 16 of 38 patients who were previously reported¹. All patients presented with P-HUS between April 1999 and February 2010: Median age at presentation: 10 months (IQR:8,17), M:F 6:10, (0.6). Median duration of hospitalisation: 37 days (IQR:23,75 days). Median eGFR 54 mls/min/1.73 m² (IQR:25,81) with median duration of follow-up: 10 years (IQR: 8,12). At time of follow up, none were on dialysis but three patients [18%] had received renal transplants without recurrence. Nine patients [56%] were on anti-hypertensive treatment at follow up, 7 of whom are on monotherapy [ACEI(5)] and 2 on dual therapy [ACEI with other]. Three patients had persistent proteinuria. Individual data will be presented. Following PCV7 introduction in 2010, the predominant serotype was 3 [previously 19A] and after PCV13 introduction, no cases of P-HUS have been observed since 2012.

Conclusion Over 60% of P-HUS patients under follow-up have chronic kidney disease. Ongoing analysis involving more UK centres is underway including those discharged from care.

REFERENCE

1. Waters, et al. *J Pediatr* 2007 August; **151**(2):140–4.

G22

AN OBSERVATIONAL STUDY OF CHANGE IN OXYGENATION INDEX (OI) AND PAO₂/FIO₂ (PF) RATIO FOLLOWING ADMINISTRATION OF METHYLPREDNISOLONE FOR PAEDIATRIC ACUTE RESPIRATORY DISTRESS SYNDROME (PARDS)

RB Mitting, H Egan, P Goley, S Nadel. *Paediatric Intensive Care Unit, Imperial College Healthcare NHS Trust, London, UK*

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Aims Indiscriminate corticosteroid use in pARDS is likely to be harmful, and the development of a randomised, controlled trial (RCT) may be difficult as corticosteroid exposure is very common.¹ The only existing RCT evidence is involving adult patients, and a recent meta-analysis is suggestive of benefit.² We have performed a retrospective observational study of serial OI and PF ratio measurements in a cohort of patients with pARDS and failure to wean from invasive mechanical ventilation at 7 days. All patients were treated with prolonged, low dose methylprednisolone.

Method All patients in a single, general PICU treated with methylprednisolone for pARDS between 01 st January 2011 and 31 st December 2016 were included. OI and PF ratio were calculated daily from admission until weaned from invasive mechanical ventilation.

Results 55 patients. Median age 10 months, 45% female. The majority had a respiratory infection as the trigger for pARDS and 95% had significant co-morbidity. Median duration of methylprednisolone therapy=11 days.

Median OI was highest on the day of commencement of methylprednisolone (20, IQR 15–30.5) and was significantly improved on day 4 of treatment ($p=0.0021$ Wilcoxon test).

Median PF ratio was lowest on the day of commencement of steroids (96.5, IQR 63–124) but not significantly improved on day 4 of treatment ($p=0.0529$ Wilcoxon test). Adverse effects observed included new infections in 40%, hypertension in 9% and hyperglycaemia in 13%. The frequency of these were not different between survivors and non-survivors ($p=0.284$, 0.644 and 0.1 respectively).

Survival to ICU discharge was 69%.

Conclusion This data is limited as it is single centre retrospective analysis. However, the appearance of a temporal association between an improvement in respiratory status and commencement of methylprednisolone is suggestive of a possibility of benefit and should therefore be explored further in an RCT, or a multi-centre, comparative effectiveness study.

REFERENCES

1. Yehya N, Servaes S, Thomas NJ, Nadkarni VM, Srinivasan V. Corticosteroid exposure in pARDS. *Intensive Care Med* 2015 September; **41**(9):1658–66.
2. Meduri GU, et al. Prolonged glucocorticoid treatment is associated with improved ARDS outcomes: Analysis of individual patients' data from four randomised trials and trial-level meta-analysis of the updated literature. *Intensive Care Med* 2016 May; **42**(5):829–40.

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WHAT IS THE IMPACT ON NURSING STAFF CARING FOR CHILDREN WHERE LEGAL JUDGEMENTS HAVE BEEN SOUGHT TO WITHDRAW LIFE-SUSTAINING THERAPY?

¹C Schofield, ²S Playfor. ¹Manchester Medical School, University of Manchester, Manchester, UK; ²Paediatric Intensive Care Unit, Royal Manchester Children's Hospital, Manchester, UK

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Aims In recent years legal judgements have been sought more frequently seeking withdrawal of life-sustaining therapy (LST) for patients in paediatric intensive care units (PICUs). However, there is limited information regarding the impact these cases have on nursing staff. This research aims to explore the impact on staff caring for children where legal judgements have been sought to withdraw LST.

Methods Qualitative research was conducted using data collected from semi-structured interviews. A purposive sample was selected ensuring all participants have had experience caring for children in these circumstances. Exploratory research enabled detailed insight into the impact of these situations in addition to participant's experiences and perspectives.

Results Our findings have shown that the majority of participants feel caring for these children impacts negatively on their mood; this was commonly associated with beliefs that the nursing role actively contributes to prolongation of suffering. Managing relationships with the child's family has been found to be one of the most demanding aspects of caring for children when such judgements are sought. A number of complex components involved in the formation and maintenance of these relationships have been explored, all of which appear to result in significant additional stresses for the nursing staff involved. Further findings suggest that less experienced staff find it harder to dissociate themselves from the emotional aspects of these situations and as a result experience more psychological impact. Despite this, relatively little senior support is routinely offered; participants felt that this is due to the relative clinical stability of the children. Consequently, staff morale is perceived to be low when such children are on the unit.

Conclusion Our findings highlight numerous contributors that are involved in nursing staff being negatively impacted by