Aims

- Technical validation of an EV-D68 PCR.
- Determine whether a one-step PCR is sufficient or whether a two-step PCR is required for detection of the virus in respiratory tract samples.
- Determine whether any samples that tested HRV positive in our hospital between July 2018- January 2019 were in fact EV-D68 positive.

Methods and Results

- Primers and probes selected according to those already validated in Poelmana et al and tested in 1 step PCR with negative and positive control: successful.
- Sensitivity tested against NGS sequenced EV-D68 positive samples from our own laboratory, 5 from another teaching hospital and 2 QCMD samples: 1 and 2 step PCR sensitive, including 2-step PCR with internal control.
- Specificity successfully tested against many non- EV-68 samples positive for other viruses and bacteria.
- Comparison of Cq values of 1 step PCR versus 2 step PCR with internal control. Cq values 2-step PCR < Cq values 1-step PCR in all dilutions from 1:4- 1:4000. 1-step did not detect virus >1:400 dilution.
- Epidemiological study retrospectively testing all 104 HRV positive respiratory samples and DNA isolates from last week July 2018 to second week January 2019 with 2-step PCR. There were 8 positive cases, clustered in November and December.

Week 2018–2019	EVD-68 Cq value	HRV Cq value	Sample type
45	25.59	25.4	Nasal aspirate
45	34.7	26.2	Sputum
46	22.5	27.3	Nasal aspirate
47	23.2	25.7	Nasal aspirate
48	29.07	32.4	Nasal aspirate
48	27.08	33.1	Nasopharyngeal swab
49	35.24	35.3	Nasal aspirate
1	25.53	29.5	Nasal aspirate

In only one of the 8 cases was EV-D68 detected in an adult patient, who was immunocompromised and not seriously ill.

In the remaining cases, all children, none of the patients experienced concomitant central nervous system symptoms. Five cases required PICU admission, one had underlying asthma.

Conclusion A 2-step EV-D68 RT PCR should be available as an add on diagnostic test for children with acute respiratory symptoms, in particular for paediatric ICU patients.

British society for paediatric dermatology

G613

SCIN: SURVEILLANCE OF CONGENITAL ICHTHYOSIS IN NEONATES IN UK AND IRELAND: A BPSU INTERIM REPORT

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Ichthyosis is a group of incurable genetic skin conditions. Severe types usually present at birth as collodion membrane (CM) or harlequin ichthyosis (HI): the latter has a neonatal mortality rate of up to 44%.¹ There is no proven correct treatment so the neonatal management of these babies varies. We aim to establish the incidence, neonatal management and mortality of CM and HI in UK and Ireland.

Paediatricians and neonatologists report cases using the British Paediatric Surveillance Unit (BPSU) orange card scheme. <https://www.rcpch.ac.uk/bpsu-study-.congenital-ichthyosis>. The study commenced on 01/11/2018 and will run for 2 years. We collect data from reporting clinicians at 1 and 12 months.

In the first 10 months we recorded 16 babies with CM (9 male, 7 female) and none with HI. Ten were white Caucasian, 4 were Irish, Indian or Caribbean and 2 were of mixed ethnicity, with no parental consanguinity. Four had a family history of ichthyosis. Median gestation was 37+1 (range 32+3 to 40+3). Median birthweight was 2.9 kg (range 2.24 to 3.67 kg). Both values are below the national average of 37 weeks and 3.25 kg respectively.² APGAR at 10 minutes was 9 or 10 in all patients.

Two babies died: one on day 8 with presumed autosomal recessive ichthyosis and one with trichothiodystrophy on day 97. Those surviving were discharged at a median of 14 days (range 2–30).

In terms of neonatal management, 3 babies were intubated and 8 had central venous access. All were treated with emollients, 9 with antibiotic and none with acitretin. All but 2 patients were handled by the parents at the time of the questionnaire being returned. All patients were seen by dermatologists, at a median of 1 day from birth, and by ophthalmologists at median 3 days from birth.

Our data shows wide variation in neonatal management and significant mortality. This data will support an application to NHS England for funding for a highly specialised service for severe ichthyosis. We urge colleagues to notify us of all new cases to ensure an accurate national picture.

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G614(P)

SKIN DISORDERS AND ITS EFFECT ON THE QUALITY OF LIFE OF ADOLESCENTS IN SECONDARY SCHOOLS

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Aims In many low resource settings, ill health is prioritized based on its tendency to be fatal or non-fatal. Most often, skin disorders take a back seat because they are thought to be commonly non-fatal. However, evidence regarding the negative impact of skin disease on quality of life, body image and self-esteem abounds. It is necessary to bring these set of disorders to the fore, especially in adolescents, a

phase where self-worth is often judged by how a person looks.

The aim of this study was to describe the spectrum of skin disease seen in school going adolescents in a developing country and evaluate the effect of these disorders on their quality of life using the Children's Dermatology Life Quality Index (CDLQI).

Methods Adolescents attending both private and public secondary schools in a developing country were recruited using a multi-staged stratified random sampling method. Socio-demographic details were recorded and they all underwent physical examination by paediatric dermatologists. All those with skin lesions were then administered the CDLQI and scores were recorded and analyzed as appropriate using SPSS version 20.

Results Out of the 1150 students recruited, 746 (64.9%) had skin disorders. The prevalent skin disorders were acne vulgaris, pityriasis versicolor, tinea capitis, pityriasis capitis and traction alopecia which were responsible for 88.9% of skin disease diagnosed. Five hundred and forty-two (72.6%) reported an impairment in their dermatology-specific Quality of Life and majority of this number had a mild effect on life quality. The domain of the CDLQI where students had the most impairment was the symptom/feeling domain, followed by impairment from treatment. Adolescents receiving private education were more likely to report impairment in their dermatology-specific Quality of life ($p < 0.05$).

Conclusion Skin disorder is common in Nigerian adolescents with a few handful accounting for the bulk of all dermatoses seen. It is mostly associated with an impaired dermatology-specific quality of life, albeit a mild impairment. There's a need for more awareness and improved access to skin care for Nigerian adolescents.

G615(P) BEWARE! THE EMERGING SUPERBUG

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A fit and healthy 8-year old boy presented with a 10-day history of asymptomatic superficial ulcerations initially on the left great toe, and then the left elbow. He was systemically well. The general practitioner had prescribed oral flucloxacillin for infected bite marks but the patient took for 2–3 days as the parents felt some of the lesions were starting to resolve. However within days he developed new lesions on the left foot and toes and was admitted for intravenous antibiotics. On examination there was an exudative ulcerated papule on the dorsum of the left foot and left 3rd toe with surrounding erythema and oedema. Bacterial swab was positive for staphylococcus aureus (SA), and further analysis confirmed the clinical suspicion of panton-valentine-leukocidin SA (PVL-SA) positivity. The patient had a good clinical response to augmentin/clavulanic acid with subsequent decolonisation with chlorhexidine 4% body wash and nasal chlorhexidine with neomycin cream. Close contacts also received eradication therapy.

The prevalence of PVL-SA positive isolates from skin wounds is increasing. In the United Kingdom 20% of SA

isolates from skin and soft tissue were found to be PVL-SA positive (compared to 2% in 2005). Patients and/or close contacts present with either persistent purulent wounds resistant to usual treatments, or recurrent boils and abscesses. Risk factors include the 'five C's' – contaminated items, close contact, crowding, cleanliness and cuts or compromised skin integrity. The Health Protection Agency has produced guidance on the diagnosis and management of PVL-SA including eradication regimes, which our patient and close contacts received.

G616(P) CUTANEOUS MANIFESTATIONS OF CHRONIC KIDNEY DISEASE IN PAEDIATRICS IN A TERTIARY CHILDREN'S HOSPITAL IN SUDAN

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Background The skin is the largest immunological organ in the human body; it is the protective barrier of the body, so the skin changes can reflect the internal status of the body.

Many of the skin changes are known to occur in chronic kidney disease (CKD).

Several studies have evaluated cutaneous manifestations in adult patients with CKD on haemodialysis or conservative treatment worldwide, but few studies evaluated this in paediatric patients.

Objectives The aim of this study was to identify the prevalence and clinical pattern of skin manifestations among children with chronic kidney disease (CKD), and also to describe its relationship to haemodialysis and other variants: demographic, medical and laboratory values in children with CKD.

Methods The study included 50 patients, 30 were on haemodialysis and 20 patients on conservative treatment, in different stages of CKD. After history was taken and examinations was done, many parameters were evaluated in those patients including; age and gender, medications, duration of CKD and haemodialysis, causes and stages of CKD. Also, laboratory values included in the analysis were haemoglobin, calcium, urea and creatinine levels. Data was collected over a period of 6 months.

Results This study results showed skin changes were detected in 43 patients (86%), and more than one change in the same patient was seen in 18 (36%).

Skin changes noted were mainly: xerosis in 34 (68%), Pruritus in 32 (64%), hair loss in 15 (30%) and hyperpigmentation in 14 (28%) patients.

Other changes included eczema 1 (2%), urticaria 1 (2%), seborrheic dermatitis 1 (2%) and lichen planus 1 (2%).

The manifestations observed were not affected by age, gender nor by the precipitant cause of CKD.

There was a notable association between anaemia, uraemia and high serum creatinine and the presence of skin changes.

Conclusion

- Skin changes are common in children with CKD.
- These changes were mainly due to CKD rather than haemodialysis, and rarely due to drug treatment.
- Dermatological examination is important and useful and it can help point towards a diagnosis of CKD.