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.

REFERENCES

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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