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A SUCCESSFUL MODEL OF DELIVERING INITIAL HEALTH ASSESSMENTS (IHA) FOR CHILDREN AND YOUNG PEOPLE IN CARE (CYPIC) IN A PANDEMIC

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Background In the UK, from March 2020 in-person consultations were limited to reduce COVID-19 transmission. Statutory guidance recommends that these happen in a timely manner when a child enters into care. RCPCH standards state that IHAs completed by telephone should ideally be completed by in-person reviews within 3–6 months. Hence a dual clinic model of virtual, followed by short face to face appointments, was developed to minimise contact whilst ensuring quality of consultations. Follow up appointments focused on growth, physical and developmental examination and allowed the clinician to speak to the Child or Young Person in Care (CYPiC).

Objectives

- To review documentation for compliance with regulations
- To seek users' feedback and make service improvements

Methods Records for 23 of 24 users who attended virtual IHAs from April to July 2020 were reviewed from the

Abstract 363 Table 1

Information		Available	Not available
Immunisations		83%	17%
Neonatal screening		79%	21%
Health forms	Mother	67%	33%
	Father	54%	46%
Obstetric information		17%	83%
Summaries	GP	70%	30%
	Social worker	70%	30%
Discussion with	Mother	46%	54%
	Father	33%	67%
	Social worker	79%	21%

Abstract 363 Table 2 Documentation of 11 out of 13 parameters was more complete compared to the previous year

		2019	2020
Action plan complete		100%	100%
SMART plans		90%	100%
Consent (if capacity)		20%	100%
Seen alone/invited		90%	91%
Documented	Growth	100%	100%
	Health	60%	78%
	promotion		
	Wishes	80%	96%
	Behavioural needs	100%	96%
Action plan considers	Dental history	36%	75%
	Emotional needs	56%	96%
	Physical needs	100%	100%
	Wishes	30%	96%

Abstract 363 Table 3

	Agree a lot	Undecided/Don't know
<i>Did the virtual clinic offer a good service?</i>	81%	12.5%
<i>Was the follow up face to face clinic useful?</i>	87.5%	6%

electronic CYPiC database (excluding one child who ceased being in care after the virtual clinic). Service users were asked to provide written feedback after each appointment.

Results Waiting times for face-to-face appointments ranged from 16–124 days, median 47 days (within recommended timeframe). 74% had the same clinician for both appointments, ensuring continuity of care. Appropriate consent was taken in all cases. Additionally, consent was taken from every young person with capacity to consent. 91% were invited to be seen alone. Wishes and feelings were taken into account in all but one child. Most (but not all) of the relevant information to aid completion of the IHA was available.

Response rate to the feedback forms was 70%.

Positive comments included 'comfortable in own home – more relaxed' and 'treated same as if in clinic'. There were 2 negative comments – 'video link not working' and 'uncomfortable wearing a mask'. No users mentioned attending 2 appointments as a negative aspect.

Conclusions Despite limitations in delivering services during the pandemic, this dual model of clinic delivery ensured a high quality service. Feedback was positive as was user engagement with this model which emphasized child-centric care. Learning from this can be applied to other clinics such as review health assessments. Holistic CYPiC statutory assessments through efficient use of virtual technology, in combination with outcome focused in person reviews may become more common place in the future.

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CASE REPORT: RARE CASES OF ANTENATAL DIAGNOSIS OF CONGENITAL ARACHNOID CYST – REVIEW OF 2 CASES

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Background Case 1: Mum was a 30 years old multiparous woman and known smoker. Antenatal ultrasound scan showed an intracranial arachnoid cyst measuring 14 × 13 mm, that continued to grow in subsequent scans.

Baby was born at 37+5 weeks and day 2 cranial ultrasound scan showed a large cystic lesion on the suprasellar region measuring 17 × 17 mm.

MRI on day 6 of life showed a large suprasellar arachnoid cyst 18 × 22 mm in size which was causing significant mass effect displacing and compressing the midbrain and basal ganglia. As the baby was clinically asymptomatic and progressing and developing appropriately, the neurosurgical team opted for a conservative management with a multidisciplinary approach with involvement of ophthalmology, endocrinology, and local general paediatricians for close monitoring of growth and development as well as regular blood tests (Renal function and pituitary function). He remains well until the present and is currently 15 months old.

Case 2: Mother was 34 years old smoker and multiparous. Antenatal ultrasound scan showed a left sided 25 × 33 mm intracranial arachnoid cyst.

Postnatal cranial ultrasound performed on day 3 of life showed a large arachnoid cyst 37 × 47 mm in size on the left posterior area of the brain. At the Neurosurgical follow up clinic MRI showed the cyst was stable in size with mild mass effect noticed. The baby remains under close follow up and monitoring by the neurosurgical team, with conservative management until the present at age of 16 months.

Objectives

Methods

Results Review & Discussion: Arachnoid cysts are benign cysts that occur in the cerebrospinal axis in relation to the arachnoid membrane. They are most commonly developmental anomalies, however some are acquired and they represent 1% of all space occupying lesions in childhood.

Arachnoid cysts in the antenatal period can be found in isolation or with other intracranial abnormalities associated. The antenatal diagnosis should be confirmed by neonatal neuroimaging; cranial ultrasonography is the first line imaging modality and should happen within the first 24 hrs of age. Brain MRI is the gold standard investigation and should happen within the first 2 weeks of life. Antenatally diagnosed arachnoid cysts may remain clinically silent in postnatal period or even regress spontaneously; but they usually have a tendency to grow rapidly in the perinatal period.

There is no clear guidance on the most appropriate management strategy for these cases. Management include different types of neurosurgical procedures, but endoscopic ventriculocystocisternostomy seems to be the overall preferred approach. **Conclusions** Arachnoid cysts are rare and can remain silent during childhood before presenting with clinical manifestations. Rapid enlargement of incidentally diagnosed antenatal arachnoid cysts can occur in perinatal period. Serial evaluation by imaging in the perinatal period is necessary to demonstrate the rapid cyst enlargement and the need for appropriate intervention. Neurosurgical approach is variable and dependent on clinical features and the department's experience or preference, but the cysts which occur in isolation without any other intracranial anomalies and with normal karyotype usually lead to a good outcome.

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THE RELATIONSHIP BETWEEN SERUM VITAMIN D LEVELS AND ASTHMA PREDICTIVE INDEX (API) IN WHEEZY INFANTS

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Background The relationship between wheezing in infancy and future development of asthma has been under investigation for a long time. API is a widely accepted clinical index to define asthma risk. On the other hand, vitamin D was found to play a principal role in decreasing disease severity of asthma and other allergies.

Objectives To delineate the relationship between the serum level of vitamin D and asthma predictive index in wheezy infants.

Methods In this cross-sectional study fifty wheezy infants and thirty healthy controls of matched age and sex were included. Feeding history and exposure to environmental factors and

were assessed through parents' questionnaire. The clinical characteristics of the children were assessed as well as the asthma predictive index. The serum levels of vitamin D, Calcium and Phosphorus were measured in all patients. Correlation analysis was used to evaluate the relationship between homogeneously distributed variables.

Results Thirty-three of the fifty wheezy child (66%) were recurrent wheezers (had more than three wheezing attacks/year). The Asthma Predictive Index (API) was found to be positive in thirty two patients (64%). Serum Vitamin D was significantly lower in wheezy infants compared to control group as well as API (+ve) patients compared to API (-ve) patients ($p=0.013$, $p<0.01$ respectively).

Serum Vitamin D level showed significant (-ve) correlation with number of previous wheezing episodes ($p<0.01$). No significant difference was found between the API (+ve) group and API(-ve) group in terms of other laboratory markers (Calcium, Phosphorus and Eosinophil count).

Conclusions Vitamin D deficiency was found to be more prevalent in wheezy infants than controls, suggesting it might play an underestimated role in pathogenesis of wheezes in infants. We also suggest that serum vitamin D levels might be used as a biomarker for prediction of (+ve) API state, raising the possibility of having childhood asthma.

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EARLY-LIFE SKIN MICROBIOME AND SUSCEPTIBILITY FOR DIFFERENT ECZEMA SUBPHENOTYPES BY ATOPIC STATUS

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Background Eczema is a common skin inflammatory disorder during infancy. An increasing number of studies have shown an association between eczema and skin microbiome fluctuations. Skin dysbiosis was reported to precede the onset of infant eczema by both culture-based and sequencing-based analyses. However, the pathophysiology of eczema is highly complex and heterogenous. Given that eczema is an umbrella term for atopic (IgE-associated) and non-atopic (non-IgE-associated) forms of eczema, whether skin microbiome plays an important role in determining the subtypes of eczema by atopic status still remains unclear.

Objectives This prospective study aimed to investigate whether profile of early-life skin microbiome in atopic eczema patients was different from that of non-atopic eczema patients.

Methods We followed up 120 Chinese infants in Hong Kong from childbirth for one year. At 12 months, eczema was diagnosed by paediatricians according to Hanifin and Rajka criteria, and meanwhile skin prick test (SPT) for common inhalant and food allergens was conducted to assess atopic status. Based on diagnoses and SPT results, the 120 subjects were further subclassified into atopic eczema group, non-atopic eczema group, and non-active eczema group at 12 months. For each subject, microbes in skin swabs collected at left antecubital fossa were longitudinally sampled at 1, 6 and 12 months. Skin microbiome data was generated by 16S rRNA sequencing. Differentially abundant taxa between atopic and non-atopic eczema groups were assessed by a newly developed statistical methodology called Analysis of Compositions of Microbiomes with Bias Correction (ANCOM-BC).