vitamin K and PIVKAI levels if they consumed a minimum of 200 mls prescribed sip feed or 400–800 mls gastrostomy feed daily.

16/16 (100%) patients took a multivitamin/mineral supplement; none contained vitamin K.

Summary The prevalence of vitamin K deficiency is 37.5% in this cohort. Patients whom were not consuming gastrostomy/sip feeds of at least 200 mls daily were at greatest risk of vitamin K deficiency. Patients on a micronutrient supplement remain at risk of vitamin K deficiency, as most contain no vitamin K. Prescribing a vitamin/mineral supplement that contains vitamin K is prudent.

12-week supplementation of oral vitamin K (5 mg/day for 1–10 years and 10 mg/day for 12–17 years) adequately improved stores.

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'THE IMPORTANCE OF PEER-SUPPORT FOR CLINICAL ACADEMICS AT GREAT ORMOND STREET CHILDREN'S HOSPITAL'

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10.1136/archdischild-2020-gosh.69

Over the last four years, ORCHID (the Centre for Outcomes and Experience Research in Children's Health, Illness and Disability) at GOSH has had great success in supporting nurses, allied health professionals (AHPs) and a junior doctor to apply for clinical academic funding from a range of highly competitive schemes, including the National Institute of Health Research (NIHR). This support has included the running of an internship programme funded by the GOSH NIHR BRC, regular teaching, and knowledgeable and supportive academic supervisors. This has enabled each clinician to lead on research and make valuable contributions to patient care in their specialist fields.

The process for individuals undertaking a PhD can be a challenging, and often lonely experience. The transition from expert clinician to novice researcher can be a shock. An important way to alleviate some of these challenges is to surround oneself with people who are enabling and supportive.

Peer-support has proved to be an invaluable source of support for this growing group of multi-disciplinary researchers. This diverse group, made up of a dietician, family therapist, junior doctor, nurses, physiotherapists, radiographer, speech and language specialist, occupational therapist and an orthoptist, has created a WhatsApp group, held virtual and in-person, social evenings and discussion forums to allow the sharing of positive and negative experiences, dissemination of practical tips and provision of moral support. The group has created a non-threatening, respectful, safe environment and welcomes all clinical academics embarking on a PhD.

This network of engaged, expert and motivated professionals is key to delivering world-leading patient outcomes and developing the GOSH research leaders of the future. Ensuring

their success, using the peer support described, will help support the Trust's aim of establishing a formal clinical academic career pathway for nurses and AHPs, as part of it becoming a research hospital.

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ANAESTHETIC MANAGEMENT OF PATIENTS UNDERGOING AORTOPEXY: A 4 YEAR REVIEW

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10.1136/archdischild-2020-gosh.70

Objectives Aortopexies are part of GOSH's specialist tracheal services offered to children with severe tracheobronchomalacia, with an average of 10 cases performed per year. We wanted to identify safe and effective aspects of the anaesthetic care within this complex group of patients undergoing the procedure.

Methods We looked at patient characteristics and anaesthetic management of 26 aortopexies over 4 years with a view to creating some guidance for future practice.

Findings 26 patients (weight range 2.6 – 40 kg, from corrected gestational age of 38 weeks to 15 years of age) underwent aortopexies via the median sternotomy (n=15), thoracotomy (n=2) and thoracoscopic (n=9) approaches. These patients had complex medical backgrounds, including vascular compression of the trachea and trachea-oesophageal fistulae. The anaesthetic approach was tailored to the surgical approach, with median sternotomy (MS) and thoracotomies (To) requiring more analgesia, blood transfusions, invasive monitoring and use of longer-acting muscle relaxants to facilitate safe transfer to Intensive Care (ICU), compared to the thoracoscopic (Tc) approaches. All but one of the patients required postoperative ICU care. The median time to extubation was 2 days and the median stay in ICU was 5 days. The intraoperative course seemed safe overall with no documented intraoperative cardiac arrests and/or deaths. The MS and To cases were carried out in cardiothoracic theatres whereas the Tc cases were performed in general theatres. All the patients were fully paralysed and intubated for the procedure, with no noted trend of difficult intubations. 3 cases required blood transfusions of 10–20 ml/kg and no further blood component.

Conclusions We have been able to highlight areas contributing to safe care of this heterogeneous group of patients, including availability of ICU beds and appropriate location of surgery. Doing a prospective study in future will address some of the limitations of comparing these groups retrospectively.

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IT'S LIKE THE FUTURE! ART IN THE ZAYED CENTRE FOR RESEARCH

¹Vivienne Reiss, ¹Rosie Nash, ²Susie Hall. ¹Great Ormond Street Hospital; ²GOSH

10.1136/archdischild-2020-gosh.71

The award-winning art strategy for the Zayed Centre for Research into Rare Disease in Children has delivered a programme of art commissions that create an inspiring, playful and welcoming environment for patients, their families, staff and other visitors. The art programme responds to the design of the building and integrated art installations aim to support

the architectural aspirations, facilitating chance encounters and exchanges between researchers and clinicians. Additionally, the intention is for the art commissions to convey, in a creative way, the importance of research into rare diseases by engaging the building users and public. The art commissions are a celebration of the collaborative and visionary nature of the Zayed Centre for Research.

72 'KICKING UP OUR HEELS' WORKSHOP – AN ARTS INTERVENTION TO SUPPORT STAFF SELF CARE

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10.1136/archdischild-2020-gosh.72

Professor Brian Lobel and Dr Emily Underwood-Lee will share their methods and findings from the 'Kicking Up Our Heels' GOSH Arts project which took place in Great Ormond Street Hospital in 2019 and 2020. The project encouraged parents and families of patients of Great Ormond Street to think about their own self-care. During this session you will be gently encouraged to think about your self care as a staff member at GOSH.

'Kicking Up Our Heels' used performance and visual art to involve parents/carers of children at GOSH in considering their own wellbeing as primary carers. Brian Lobel and Emily Underwood-Lee invited parents/carers to take part in a playful performative 'survey' about how they nurtured and looked after themselves whilst caring for a child in the hospital. In their responses parents were encouraged to get beyond the notion of the 'good parent' who subjugates their needs for those of their children. The responses were used by artist Emily Speed to design a permanent artwork, Cocoon, which was installed at GOSH in February 2020 and was accompanied by a paper booklet 'You are Doing a Great Job', which incorporated ideas and activities offered by parents to improve their own and others' wellbeing.

73 OH MY GOSH, YOU'RE WELCOME KITTEN! WORKING WITH MCU TO RE-INVISAGE SPACES FOR MENTAL HEALTH

Susie Hall. GOSH

10.1136/archdischild-2020-gosh.73

Madlove/GOSH Arts/Wellcome Trust.

Artist and mental health activist the vacuum cleaner was commissioned by The Wellcome Collection to create an exhibition piece for their new permanent gallery 'Being Human'. Working within Great Ormond Street Hospital's Child and Adolescent Mental Health unit, the vacuum cleaner (James Leadbitter) has collaborated with GOSH Arts and young people who have complex combinations of mental health disabilities.

By making a unique studio space in a temporarily disused part of the hospital, and through an in-depth process of exercises, tasks and making, he addressed themes of space, materiality, wellbeing and self-identification. These weekly interventions provided a platform for the young people with lived experience to take agency over future health care

delivery and challenging us to re-think, re-inspire and redesign healthy environments for mental distress. Through creating a vision of what mental health care could be like, and how we define our own experiences the process, which is naturally cathartic, he has also created a safe space to explore complex and challenging emotions and distress outside the confines of formal therapy. Equally it has offered adults and young people, care givers and care receivers relational experiences.

The outcomes of this unique and delicate process have informed a new artwork which takes the form of a play and touch model - containing a range of play objects, smells and textures that allow gallery visitors to create a healthy environment that would support our mental health. The outcomes were also shared in the brief to architects working on the new CAHMS unit at GOSH.

74 HYPERMOBILITY IN YOUNG BOYS WITH DUCHENNE MUSCULAR DYSTROPHY AND THE EFFECT ON ATTAINMENT OF WALKING AGE AND NORTH STAR AMBULATORY ASSESSMENT FUNCTIONAL SKILLS

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10.1136/archdischild-2020-gosh.74

On average children with hypermobility achieve motor milestones later than peers without. This study looked at the prevalence of hypermobility in a sample of

Duchenne Muscular Dystrophy (DMD) and aimed to determine if hypermobility has an impact on walking age and delays attainment of functional skills assessed by the North Star Ambulatory Assessment (NSAA).

This is a retrospective study of 158 boys with DMD aged 3 to 8 years (± 3 months). During clinical appointments each boy was assessed using the NSAA, joint ranges measured and age of walking noted. Hypermobility was determined using the revised Beighton scale where a score above 4 is considered hypermobile.

The young DMD population had a higher percentage, 18%, of hypermobility compared to healthy controls, 7%. The pattern of hypermobility in DMD differed as well; knees and elbows were more commonly hypermobile compared to the expected ankles and thumbs. In DMD only 5% had hypermobile ankles compared to 22%. Hypermobility in DMD ankles often quickly tightened.

Non hypermobile DMD boys walked on average at 17.8 mths (range 10–36 mths). This was similar to hypermobile boys; average 19 mths (range 13–36 mths).

Hypermobility DMD boys were found to have a lower average NSAA at each age point than those who weren't hypermobile, approximately 6 months behind. Both DMD groups gained functional skills with increased age until 6.5 (non hypermobile) and 7 years (hypermobile). Both groups subsequently declined.

Hypermobility is more common in DMD and impacts development of later functional skills, however doesn't dramatically influence age of walking started. Hypermobility should