Clinical Characteristics and Management of children with Kawasaki Disease in the UK - a Retrospective Analysis

Department of Paediatrics, Riga Stradiņa University, Riga, Latvia; 2Department of Paediatrics, University Hospital Lausanne, Switzerland; 3Department of Paediatrics, Academic Medical Center, Amsterdam, the Netherlands; 4Department of Paediatrics, University Hospital of Heraklion, Crete, Greece; 5Department of Paediatrics, Children's Hospital, University of Lausanne, Switzerland; 6Department of Paediatrics, Royal Children's Hospital, Melbourne, Australia; 7Department of Paediatrics, Royal Hospital for Children, Glasgow, Scotland; 8Department of Paediatrics, Royal Hospital for Children, Glasgow, Scotland; 9Department of Paediatrics, King's College Hospital, London, UK; 10Department of Paediatrics, University of Cambridge, Cambridge, UK

Abstract

Objectives: The aim of this study was to evaluate the clinical characteristics and management of children presenting with Kawasaki Disease (KD) in the UK.

Methods: Children aged 1-18 years diagnosed with KD in the UK between January 2018 and March 2020 were included. Data were collected from clinical records and electronic databases.

Results: A total of 121 children were included. The median age at diagnosis was 2 years (IQR: 0.5-5). Arterial aneurysms were present in 98% of cases. Antigenemia was positive in 97% of cases. CRP levels were elevated in 94% of cases, while fever was present in 93%. Urgent treatment was required in 72% of cases. Mortality was 0.8%.

Conclusions: This study highlights the importance of prompt diagnosis and treatment of KD in the UK. Further research is needed to improve outcomes and develop standardised guidelines.

Acknowledgements: This study was supported by the British Paediatric Allergy and Immunology Group.
presentation of PIMS-TS is varied and heterogeneous. A strategy of education and continuous updates with case based discussions and literature review was put in place. This was to inform frontline doctors and nurses in the trust and resulted in timely identification, treatment and referral of the children who presented with PIMS-TS. Good clinical examination, following APLS, NICE and RCPCH guidelines and discussion with a tertiary centre remained the cornerstones in the management of the children with PIMS-TS in ED.

British Academy of Childhood Disability

EXAMINING THE IMPACT OF VIRTUAL CONSULTATIONS DURING THE COVID PANDEMIC ON CHILDREN WITH CEREBRAL PALSY USING THE CEREBRAL PALSY INTEGRATED PATHWAY (CPIP) DATA

Alison Sansome, Kuldeep Stohr, Amanda Birchall, Rachel Martell, Vivien Wong-Spracklen, Cambridge Community Services NHS Trust; Cambridge University Hospitals NHS Foundation Trust

Background In the first lockdown period community services were quick to move to virtual assessments and this was seen as a huge success in the use of technology. It became clear that there was significantly above expected deterioration in function and ability in our children with Cerebral Palsy. Whilst there is a desire amongst some within the service to maintain this virtual approach, there is a question as to whether virtual assessment is in fact good enough for the long term care of these young people.

We have used the Cerebral Palsy Integrated Pathway (CPIP) UK for 3 years. This is an evidence based tool for hip surveillance and monitoring of contracture/deformity in the lower limbs of children with cerebral palsy. Children and young people are seen at regular intervals dependent on their age and severity of cerebral palsy (based on gross motor functional classification system GMFCS). Joint measurement is colour-coded in a traffic light system where green is ‘no concern’, amber suggests an ‘area of concern which may require intervention’ and red ‘needs action or intervention’.

Objectives To examine the impact of Covid related operational changes (reduction in face-to-face services) on pre- and post-Covid measurements extracted from CPIP data.

Methods A retrospective study of 97 patients aged 3–20 years (mean=10.33) registered under our Trust CPIP UK Registry. Paired-sample t-tests or Wilcoxon Signed Rank tests were performed using SPSS Software. Statistical significance was indicated at 0.05.

Results Of the 97 patients, 54 were male. 43 children had hemiplegic cerebral palsy (20 left sided and 23 right sided), 32 were diplegic distribution, and 22 were quadriplegic. The GMFCS score of severity was also recorded: 42 Level I, 25 Level II, 8 Level III, 13 Level IV and 9 Level V.

The CPIP database pre- and post-lockdown measurements were compared. A significant difference was found between pre- and post-scores for Knee Popliteal Angle on the Right (t=-2.42, p=0.02). Where the mean score for 90 Children was pre 36.14 and post 39.24 degrees. A significant difference was also found between pre- and post-scores for Knee Popliteal on the Left (t=-2.78, p=0.01). The mean score for 88 children was 36.23 degrees pre and 40.09 post.

Also significantly deteriorated was Ankle Dorsiflexion on the Right, (t=2.79, p=0.01), where 85 children showed a mean dorsiflexion to 9.6 degrees above neutral pre and 6.91 post. Ankle Dorsiflexion on the Left also significantly deteriorated (asymptotic sig=0.01). 88 children had a mean pre-value of 7.95 degrees above neutral and 5.47 post.

Therefore, hamstrings and gastrocnemius muscle groups showed significant deterioration during lockdown.

Of note, 4 children received interventions: 2 had intramuscular Botulinum Toxin injections, 2 had orthopaedic surgery. Children receiving interventions did not deteriorate.

Conclusions The CPIP database is an excellent resource for comparison studies in cerebral palsy. The children who received interventions seemed to be protected from deterioration. This study demonstrates the importance of face-to-face consultations and interventions in preventing deterioration in children with spastic cerebral palsy. Virtual medicine is inadequate for this patient group.

Quality Improvement and Patient Safety

IMPLEMENTATION OF A NEONATAL DAILY REVIEW SHEET ON A POST-NATAL WARD

Rosaline Gar, Richard Scowcroft, Klara Vataha, St Helens and Knowsley Teaching Hospitals NHS Trust (Whiston Hospital)

Background The paediatric team review babies daily on the busy post-natal ward located within the maternity unit. It was noted that there was lack of clarity in the daily documentation regarding neonates. Current documentation was in a folder comprised of multiple documents written on randomly assorted continuation sheets. There is a daily rotation of medical and midwifery staff and not a formal multidisciplinary team ward round which leads to chaotic environment regards patient plans and discharges and potentially creates excessive work for senior staff members as plans and follow up plans not clearly documented.

Objectives The objective of this study is to improve continuity of care and communication by implementation of a daily review sheet with aim to make documentation clear and provide guidance for daily review for junior doctors who frequently rotate.

Methods We created a daily review sheet to be used on the post natal ward for neonates on the medical ward round. We created a pre implementation and post implementation questionnaire to be filled out by members the medical team to compare any subjective improvement the daily review sheet has made. The questionnaire contained 7 questions regarding whether staff thought different aspects of documentation and communication was clear with a suggestions/comments section. A Likert scale with questions ranked from 1 – 5 with 1 equal to agree and 5 equal to disagree, therefore 3 equals neither agree or disagree.

Results 14 members of staff filled in our questionnaire before and 12 after (table 1).