Total no of cases – 277

Results
1. A significant rise in the overall incidence of the disease was observed with number of cases doubling over the last 10 years; from 18 in 2009 to 35 in 2018 & 40 in 2019. In 2020, 24 cases were diagnosed till August. To mention, there were 178 KD cases from 2009 to 2017.
2. Majority (80%) of the children presented with complete form of KD.
3. Till 2017 the incidence of coronary artery aneurysms (CAA) was 12 to 15%. A rise in the CAA was observed over the last 2 years with 6 cases in 2018 (17%) & 13 (32.5%) in 2019. It is interesting to note that majority of the 13 patients in 2019 was diagnosed and administered IVIG within 10 days of disease onset and 3 of the 13 children had CAA at diagnosis.
4. There has been a significant increase in IVIG resistant KD. 12 patients with IVIG resistance were recorded from 2009 to 2017. However, in 2018 there were 7 cases (20%) and 10 cases (25%) in 2019. 25 children with resistance to first dose of IVIG received Infliximab since January 2016. All of them had a favourable response with rapid control of fever and CRP.
5. 10 children over the last 4 years have developed giant aneurysms (x score more than 10) in spite of timely initiation of IVIG. 4 of them had persistent ballooning even after Infliximab administration post IVIG.

Conclusions
1. The number of patients diagnosed with KD has doubled over the last 10 years. Whether it is a true increase in incidence or because of increased detection remains speculative.
2. It seems that the disease is behaving more aggressively with higher incidence of coronary aneurysms and IVIG unresponsiveness in spite of timely IVIG administration.

Association of Paediatric Emergency Medicine

VIRTUAL FRACTURE CLINICS SIGNIFICANTLY REDUCE FACE-TO-FACE CONTACTS AND RADIOGRAPHS IN CHILDREN PRESENTING WITH MINOR TRAUMA

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Background Covid-19 has presented major challenges to face-to-face clinical encounters and facilitating safe and effective care remotely that is acceptable to children, parents and healthcare professionals is therefore of significant interest.

Objectives To determine risks and benefits associated with a change in service delivery of paediatric minor injury follow up.

Methods We conducted a prospective audit during introduction of a paediatric virtual fracture clinic (VFC) and associated same-day orthopaedic telephone advice line, staffed by orthopaedic consultants and registrars, on the outcomes of attendances to a dedicated paediatric emergency department at a district general hospital and associated minor injury units spanning nine weeks from April to June 2020, coinciding with the UK’s first national lockdown due to Covid-19. Results were compared to a similar number of cases using standard face-to-face fracture clinics without an orthopaedic advice line during April 2019.

Patients were identified through the department’s established procedure for paediatric x-ray follow up and were included if they were suspected or confirmed to have an acute fracture or soft tissue injury. Patients were excluded from analysis if they presented with a soft tissue infection, wounds without fracture, non-acute injury or condition, were admitted to hospital or had safeguarding concerns.

Initial and final diagnosis and management, number of radiographs, missed fractures, hospital attendances for the same injury, ‘did not attend’ episodes, adverse events and unplanned returns were recorded.

Results There was a notable reduction in patient numbers during Covid-19 study period (1.4 vs 4.3 patients per day), commensurate with an overall drop in paediatric attendances during national lockdown. Reasons for attendances were broadly similar between VFC and standard practice groups, with comparable rates of admission (8.1 vs 11.6%).

Compared to the standard practice group, the VFC group demonstrated a significant reduction in average face to face visits per patient (1.8 vs 2.9, p = 0.00001), average number of radiographs per patient (1.5 vs 1.8, p = 0.01) and no increase in rate of unplanned returns (0.06 vs 0.1 per patient). There were 2 instances of difficulty contacting parents for VFC appointments, which were both resolved by parents contacting fracture clinic.

There were 3 instances of missed fractures in the VFC group; 1 was missed in the emergency department and so unrelated to the introduction of VFC, 2 were missed after discussion with the advice line, of which 1 was detected after returning with on-going pain, put into a temporary back slab and discharged after 1 virtual clinic and the other which did not result in any change in management. There was 1 missed fracture in the standard practice group, but this was excluded from analysis due to missing records. Overall management in both groups was similar.

Conclusions Face-to-face appointments for paediatric minor trauma can be safely replaced with a virtual fracture clinic system and associated advice line. This effectively saves each child one attendance per injury and one x-ray for every three children attending with minor injuries. Benefits would include reductions in missed school and work days for children and carers, and financial savings for healthcare organisations.

Quality Improvement and Patient Safety

WADING THROUGH THE PAPERWORK: MAKING COMPLEX PATIENT NOTES EASIER TO NAVIGATE

Katherine Taylor, Nicola Davey. 1North Middlesex University Hospital; 2QIClean

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