

Paediatric Plastic Surgery

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Faculty

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Dr D Johnson, Consultant Paediatric Anaesthetist, Leeds

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Resources

- Mitigating the risks of surgery during the COVID-19 pandemic- [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31256-3/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31256-3/fulltext)
- Editorial on getting surgery and anaesthesia restarted after COVID <https://pubmed.ncbi.nlm.nih.gov/32428245/> Article concludes that while there are patients that require surgery and surgeons and anaesthetists to undertake this all other parts of the pathway require change
- Hyperinflammatory shock in children during COVID 19 pandemic [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31094-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31094-1/fulltext)
- How should non-life-saving surgery be rationed? <https://blogs.bmj.com/medical-ethics/2020/06/02/how-should-non-life-saving-surgery-be-rationed/>
- Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection- international study [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31182-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31182-X/fulltext)

General Overview

- Move to online consultations/Zoom MDT's may be something to keep hold of on the other side of the crisis- this has been well received and positive
- Paediatric services in general have been shut down, mainly because of capacity, though urgent/time-specific procedures have been continuing.
- The backlog of cases is considerable and it's unclear how this will be managed across the country

Points from each speaker

Background (A Hart) [link to video](#)

- Overwhelmingly, paediatric mortality has plummeted during COVID- children have been less affected by COVID, but children's surgery services have been affected nonetheless

Virological aspects relating to people going to theatre (B Healy) [link to video](#)

- Most of data relates to adults, but limited data available relating to children
- Evidence indicates that risk of patients not surviving GA are greatly increased if incubating COVID
- Recommendations to mitigate this risk for adults include pre-op screening with 14 days of strict isolation to pick up anyone incubating the disease, a pre-op PCR and possibly a CT scan
- Suspect the outcome for children undergoing GA will likely be much better but it's not possible to say for certain at present, and continued caution is urged until the evidence base catches up.

Plastics during Corona- local experience (K Stewart) [link to video](#)

- Early on in pandemic, shut down paediatric plastics service and many staff were moved to deal with COVID
- Scottish government have produced a route map, but no clear guidance yet on when elective surgery, independent clinics can open and how the backlog will be cleared.
- Have been looking at using other tech, such as 3D printed person-specific PPE, remote consultations,

Anaesthetic perspective (D Johnson) [link to video](#)

- Have started testing paediatric patients and asking patients and parents to isolate prior to being admitted
- Have altered anaesthetic techniques (eg preoxygenate and IV induction, use of cuffed ET tubes)- note in some cases altered techniques may not be suitable for individual children and it is recognised that it may be necessary to undertake a higher risk technique.
- Alternatives such as sedation/local/regional anaesthetics versus general are likely to be used more- parents are requesting local rather than general anaesthetics, recognising the potential increased risk of undergoing a procedure under GA
- Editorial on getting surgery and anaesthesia restarted after COVID
<https://pubmed.ncbi.nlm.nih.gov/32428245/> Article concludes that while there are patients that require surgery and surgeons and anaesthetists to undertake this all other parts of the pathway require change

Children's hands- a tale of two hospitals (G Smith) [link to video](#)

- A comparison of the differing situation in paediatric care in two hospitals in London (GOSH and Chelsea and Westminster)
- In spite of sites being geographically close, the handling of challenges surrounding COVID have been very different

COVID impact on congenital hand surgery (D Boyce) [link to video](#)

- All congenital hand surgery work has stopped in Swansea
- Difficult to give informed consent when evidence isn't there to, for example, confirm or deny risks associated with GA and COVID.
- Acknowledges difficulty going forward, with regards to clearing backlogs and how to prioritise paediatric cases in relation to all procedures that have been put on waiting lists because of COVID

Erbs palsy care pathway (G Bourke) [link to video](#)

- Children's wards and ITU converted to support adult services in Leeds, but because of lower incidence of COVID, there wasn't so much of a surge in this area as in other parts of the country
- Regarding Erbs palsy, less face to face contact for support/therapy because of the current situation. Have always done virtual clinics, but this has increased

Paediatric craniofacial surgery (D Dunaway) [link to video](#)

- Have been undertaking Category 1 and 2 operations, but management of chronic problems has been more challenging, in having limited access to patients- no face-to-face clinics, urgent problems only seen on ad hoc basis.
- Lack of social and psychological support has been difficult
- Skull base surgery is aerosol generating, but have undertaken some procedures, including those that are time-dependent, in full PPE
- Backlog across entire service of around 800 hours has built up- unsure how this will be handled

Recommencing cleft surgery (C Russell) [link to video](#)

- Looking to recommence cleft surgery, but uncertainty still remains around risk to patient/clinical team, available resources, and competing specialty requirements
- As in other areas, had introduced video consultations pre-COVID
- Surgery was suspended from mid-March to end of April at which point, surgery was reintroduced, but as COVID priorities changed, capacity for elective procedures was reduced.
- CRANE data indicates that if primary cleft repair is undertaken at 14 months plus, patient outcome is not as favourable as operating at 4-13 months

Hypospadias service provision (N Wilson-Jones) [link to video](#)

- All hypospadias provision in Swansea stopped in March, along with all paediatric elective cases
- Limited evidence collected regarding poor outcomes in cases of delayed surgery.
- Have been able to bring in virtual clinics, in spite of not being allowed pre-COVID
- Looking to bring in MDT video conference with patient's family prior to seeing in person

Questions and discussion ([link to discussion](#))

- Need to consider risk categorisation prior to surgery- asking to isolate for 14+ days will be difficult for families- there needs to be a balance between practicality and the (limited) evidence]
- Leeds: swab parent as well as child- because of difficulty in obtaining a swab from a small child, would it be reasonable to ascertain infection by swabbing parents too?
 - Because people shed the virus differently, a positive parent may not pass the virus on so while it may be useful to swab a parent as they'll be on the ward with the child post-surgery, it may not necessarily be the case that a positive parent will equal a positive child.
- Evidence is patchy surrounding virus shedding, and as such testing isn't necessarily unreliable, but an individual could test positive, then negative in continuing cycles, as they shed the virus in differing waves
- Concerns that operators wearing full PPE will be compromised in their ability, particularly in ability to communicate with the rest of the surgical team. At what point should we get to in our certainty of COVID negative status before we should feel safe in not wearing PPE?
 - Should next 'version' of PPE contain communication aids- Bluetooth headsets, microphones etc
 - Noted PPE fit test should include a test to make sure is safe to use when talking

PPE

The panel discussed use of PPE in combination with loupes and microscopes and the different options available for these [link to discussion](#)

Antibody testing

Should surgeons be screened and will it help?

We're not certain what the antibody testing means in terms of immunity and how long that immunity will last for- until the research can catch up, we can't use antibody testing as a failsafe.

As ever, as it's not possible to be 100% confident of the level of risk involved in operating, the individual has to be the one to make the decision – informed consent from all parties is again paramount, though the nature of being 'informed' is difficult when the evidence is not concrete.