

## **A Graduated Return to Elective Paediatric ENT within the COVID-19 Pandemic**

The overall population risk of paediatric infection is low. However, while it was previously considered that children do not suffer severe consequences of infection, there is increasing awareness of a group of Covid infected children who develop a variant of toxic shock syndrome.

The sensitivity of antigen testing in children is low as:

- it is more difficult to get a high-quality swab on a child as the child is likely to be less compliant
- viral clearing from the URT in a child is thought to be quicker

Treatment of a child means contact with at least two people (i.e. at least one parent) and the extra-footfall or overnight stays of adults within the paediatric environment should be considered.

### **Out-patients**

Children are less likely to be tolerant of wearing a mask when seen in outpatients or on the ward. They are more likely to cough and sneeze uncontrollably. They may not maintain a 2m distance from others, and may not be able to be fully controlled by their parents. This increases risk of viral transmission to others in the outpatient and ward environment. Availability of PPE should take this into consideration. Non-essential objects, such as toys, should be removed. Staff PPE should be strictly adhered to. There should be awareness that staff in masks and visors may cause distress or anxiety for children.

It may be appropriate for children and parents to wait outside the OPD in their car, and then be called in by text to the OPD area. This would mean less risk of cross contamination, especially with younger children who may not be able to be kept still or distancing. Consideration needs to be given in individual departments about whether the consultation room is given time to ventilate after a child has been seen who has been coughing or sneezing, and has not been able to tolerate a mask. It may be necessary to have a number of examination rooms available to allow for time for any aerosol so generated to settle.

These issues will mean that fewer paediatric patients can be seen per session, when compared to the pre-Covid era and to adults. Clinicians should not be rushed into returning to the high paediatric patient numbers seen in a single clinic, that were common in the pre-Covid era .

## **Surgery**

Ambulatory or day surgery should be utilised where possible for appropriate procedures to decrease the amount of time children and their families spend in the hospital.

A significant proportion by case load volume of paediatric otolaryngology involves AGP (adenotonsillectomy, airway interventions, chronic ear disease).

It is very rarely practical in children for the majority of procedures which pre-COVID were undertaken under GA to be feasible under LA.

See ENT UK guidance on Consent and Pre-operative Testing/ Self-isolation of Child and Parents for 14 days pre-op. Children are less tolerant of deep nasal / nasopharyngeal swabs. Oral swabs may be all that is possible with certain children.

Nasopharyngeal and posterior pharyngeal swabs could be taken when the child is under GA. This will give a higher sensitivity, and while it will not inform the nature of precautions taken pre or intra-operatively, it will help management post operatively if the child is shown to be Covid +ve.

Imaging of the chest with CXR or CT in children should only be undertaken where there is a high index of suspicion of Covid infection and not performed routinely. O<sub>2</sub> saturation measurement, and lymphocyte count testing may also be needed in these circumstances.

The non-surgical approach to management of conditions such as acute mastoiditis (in except the most advanced cases) has presented an opportunity to assess whether more prolonged medical management may be beneficial in these cases. BAPO is supporting research in this area.

## **Training**

We acknowledge that training may be a secondary consideration whilst we weather the recovery from COVID, and any subsequent waves. However, we also acknowledge the niche nature of tertiary paediatric experience is often limited anyway in a normal training programme, and so there is going to a greater effect of Covid on paediatric ENT training. In cases where there is adequate PPE and appropriate supervision we hope trainees and trainers can agree together whether any safe opportunities for training may be possible; in both operative and non-operative capacities. Training in some circumstances may not necessarily need to take a back seat or be delayed. However, in the case of any negative impact on experience this will need to be recognised, so it can be addressed appropriately at the later date.

An approach to training is unlikely to be set centrally; with geographical difference, some regions will reach a level of pre-COVID activity sooner than others, and so may be able to prioritise training at an earlier stage. Training opportunities should therefore be assessed on a case by case basis involving all relevant stakeholders.

## **Procedure/ Condition Specific Advice**

The commonest procedures in paediatric ENT are adenotonsillectomy and insertion of grommets.

Adenotonsillectomy is an AGP and there is no clear evidence about the amount of aerosol generation between the different techniques (cold steel, bipolar, coblation). It is recommended that the procedure is carried out with the technique with which the operator is most familiar. Adenotonsillectomy and tonsillectomy can be generally categorized into 3 groups of priority. Urgent cases with airway obstruction are rare and as addressed in the BAPO guidance, should be carried out as needed. Cases with moderate to severe OSA would be regarded as needing an operation soon and it may be suitable to prioritize this group when elective operating commences. A large number of tonsillectomies are for recurrent tonsillitis or mild to moderate obstruction and these can be carried out as a higher volume of elective operating is introduced. In the current status of the pandemic, full PPE is recommended (FP3/ N95).

The post-operative bleeding rate after tonsillectomy is known to be in the region of 6-7%. Children presenting post operatively with bleeding will often be spitting blood and saliva leading to aerosol generation. Any post op bleeding therefore requires full FFP3 PPE for the healthcare staff involved with management of the child in this scenario. While there are concerns regarding the availability of PPE, there needs to be consideration about the extent to which routine practice with long lists of adenotonsillectomy cases can occur. This may be reviewed as supplies of PPE improve.

Grommets involve opening of the middle ear and suction. Procedures involving suction are currently regarded as being AGPs. However in the local context of the external ear, it is not known whether this truly represents an aerosol generating procedure. Grommet operations generally fall into two groups: soon (moderate hearing loss, severe infection) or routine (mild hearing loss, infection). As elective operating is reintroduced it may be suitable to consider performing "soon" grommets. There is need for further clarification whether grommets represent an AGP and what is the most appropriate PPE required. See the BSO document for further discussion of viral load and middle ears.

Microlaryngoscopy/airway examination. This is an AGP requiring full PPE (FP3/ N95). It is undertaken for a range of conditions, and judgement needs to be made about the priorities of these cases in terms of soon or routine planning.

Middle ear and Mastoid Surgery. See BSO guidance.

Appropriate PPE is therefore needed in the outpatient setting with children, and each hospital will be able to give guidance on this.

## **Procedures that can be undertaken via LA**

Procedures which were, pre-COVID, undertaken under LA or in outpatients may still be suitable to be carried out but should be triaged on an individual basis.

Flexible laryngoscopy in children aged less than 1 is usually carried out without local anaesthetic. This procedure needs to be carried out in full PPE (FP3 or N95). It should only be carried out if there is a significant diagnostic dilemma or it is likely to move the care of the patient forward (significant or progressive symptoms and not requiring full laryngoscopy under GA).

Flexible laryngoscopy or nasendoscopy in older children may be carried out using local anaesthetic. This should be administered topically on cotton wool or equivalent rather than sprayed in to avoid extra aerosolisation. Consideration should be given to using a surgical mask for the older patient (worn by the patient), with an opening for the scope. Scoping should only be carried out if there is significant diagnostic dilemma (eg concern about possible angiofibroma in epistaxis, worsening undiagnosed dysphonia and stridor).

In children it is unlikely an upper respiratory tract cancer will be missed due to the low prevalence.

Nasal cautery under local anaesthesia should only be carried out if full conservative management and medical treatment (topical creams) have failed to settle bleeding and the bleeding is significant and prolonged. Full PPE (FP3) should be worn and topical anaesthesia should be placed with cotton wool or equivalent (no spray).