NZSOHNS GUIDELINES ADDRESSING THE COVID-19 PANDEMIC:
Moving to Level 2

On behalf of its Members the New Zealand Society of Otolaryngology, Head and Neck Surgery (NZSOHNS) COVID-19 Subcommittee continues to monitor the impact of the COVID-19 Pandemic and its evolving epidemiology in the New Zealand population. The sub-committee met on 10th May 2020 to review its recommendations.

Following the transition to Level 3 on 27th April, New Zealand has continued to see very low numbers of positive cases and the Society would again like to thank its Members for their invaluable contribution to the national response. The willingness of New Zealanders to abide by the rules of social distancing, hand and surface hygiene, and quarantine is laudable and has helped to achieve the excellent level of the virus containment in our country.

As the country emerges from the significant restrictions imposed by the Government-mandated “lockdown”, we are cognisant that as clinicians Society members will need to provide reassurance to our patients and to the public that our hospitals and clinics are safe and that we remain committed to the highest standards of care. The low numbers of new cases suggest that most patients will not harbour COVID-19, but we should recognise with transition to Level 2 there is still concern that with greater freedom of movement there is a risk that community spread may occur.

It is intended that these latest recommendations are considered in conjunction with the guidelines previously published by this Society\(^1\)\(^-\)\(^3\), the Royal Australasian College of Surgeons\(^4\)\(^-\)\(^5\), and the New Zealand Ministry of Health.

Given the current low prevalence of COVID-19 within Australia and New Zealand indicates that as a result of the excellent outcome of self-isolation there is no reason to suspect that someone who has no risk factors on screening will carry COVID-19. However, the impact of a relaxation in the self-isolation policy and the progressive return of a larger proportion of the population to the work-place remains to be determined.

The underlying evidence suggests that the majority of patients will not harbour COVID-19, and the Society recognises the Ministry’s determination that we are in the “recovery room phase” which will allow transition to Level 1 as confidence of COVID-19 containment within New Zealand is established.
Endoscopy of the airway is an essential part of the ORLHNS clinic assessment. Standard droplet precautions are thought to provide approximately 90% protection against transmission in a known positive patient, and more rigorous levels of PPE increase this protection.

With our understanding that there appears to be minimal community spread of COVID-19, NZSOHNS Council considers that these examinations could be performed with following guidelines:

**Patients with probable or confirmed COVID-19 infection (screened “red” or positive swab),** airway endoscopy should be avoided unless absolutely essential. If the examination cannot be delayed, full PPE should be employed.

**For patients at low risk of COVID-19 infection (screened “green” or negative swab),** we recommend standard droplet precautions should be used (surgical mask, fluid impervious gown and eye protection with appropriate hand hygiene).

Operational restrictions will vary by DHB and clinical environment, however clinicians should work with their centres to ensure that patient flows are managed to maintain provision for physical distancing, and there should be established policies for endoscope cleaning and room sanitisation. Each locality may employ different strategies to accommodate staff concern and to maintain staff health.

NZSOHNS encourages members to consider either innovation or modification of techniques to minimise aerosol exposure. Distancing by use of camera attachments and/or videoscope where available is to be encouraged.

**THE OPERATING ROOM**

NZSOHNS acknowledges that despite the low absolute risks there will be ongoing concerns amongst patients, surgeons, anaesthetists, theatre nurses and other hospital staff owing to the nature of aerosol generating procedures (AGPs) routinely performed by members of our Society and owing to the varying rates of asymptomatic carriage documented in various studies worldwide. The potential for this within the healthcare setting has been highlighted by recent confirmation of SARS-CoV-2 infection in self-isolating but asymptomatic nursing staff at Waitemata DHB. As contact traced individuals these would screen RED or POSITIVE and be managed accordingly.

At Level 2, NZSOHNS recommends a **staged and planned** re-introduction of elective surgery in both public and private hospitals and clinics, with consideration given to both the well-being of patients and healthcare workers.
This is supported by current Public Health data demonstrating only 78 active cases in New Zealand at the time of writing this document and single-digit new daily cases for the duration of Alert Level 3.

As previously reported, our Society’s concerns were raised with the Chief Science Advisor who acknowledged that given the absence of data, a precautionary approach seemed sensible for our sub-specialty and that a case could be made for testing to enable risk management for all involved (personal communication via email dated 25/04/2020). Consequently during Level 2, for high risk surgical AGPs (as determined by the operating team), NZSOHNS supports patient screening by a single COVID-19 swab performed at least 48 hours prior to surgery. We acknowledge that such testing may not be readily available to all clinicians and that if screening GREEN or NEGATIVE it is highly probable that the COVID-19 swab would be negative. The final decision as whether to test or not should be based on individual clinician’s judgement as to the level of risk, and type of AGP the patient would be undergoing, and type of PPE available.

For COVID-19 positive patients, surgery should continue to be deferred where possible until they recover fully from COVID-19 disease, and consideration given to consultation with the local Infectious Diseases team on appropriate timing of intervention.

For COVID-19 positive patients where an AGP is absolutely necessary, enhanced PPE should be worn; this includes N95 respirator masks, eye protection and fluid impervious gown. NZSOHNS recognises that PAPR is not widely available in New Zealand hospitals.

SURGICAL PRIORITISATION

The NZSOHNS Covid-19 team agrees with Government that the selection of patients to undergo elective surgery is ultimately a clinical decision. NZSOHNS encourages members to understand Covid-19 prevalence in their region, to be aware of the occurrence of new clusters of COVID-19, and to incorporate public health information into their clinical judgement and decision making.

As New Zealand transitions to Level 2, NZSOHNS supports endeavours to return to full provision of Category 1-3 cases as previously defined across both paediatric and adult Otolaryngology, Head & Neck Surgery. We acknowledge that public and hospital capacity remains below normal levels and clinicians should work to prioritise the most urgent cases within the capacity constraints of the clinical environment they are working within.

The Society recommends that the appropriate level of PPE for each case is discussed during a comprehensive team briefing at the start of each operating
list, and that team members are nominated to support rigorous donning and doffing protocols when required.

CONCLUSION

These guidelines shall be regularly reviewed and may be subject to change depending on the COVID-19 disease prevalence, its impact on the health and safety of members, and the impact on health facilities having to deliver elective surgery. At present, the maintenance of public health measures such as physical distancing, hand and surface hygiene remains critical.

During Level 2 the reinstatement of elective surgeries will require health administrators to monitor supplies of personal protective equipment (PPE), and ICU and general hospital capacity. Local guidelines with these issues in mind should be followed.

The New Zealand Government continues to review the impact of COVID-19 on our population on a regular basis and Society Members should keep abreast of these recommendations.

Fig. 1-3 below summarise NZSOHNS recommendations for the management of surgical and outpatient care during Alert Level 2.

References


Fig. 1: Surgical ENT procedures: COVID-19 Infection Prevention

COVID risk assessment

<table>
<thead>
<tr>
<th>Level 1 PPE</th>
<th>Level 2 PPE</th>
<th>Level 2+ PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk</td>
<td>No community spread, no symptoms in patient or only those expected for surgical condition</td>
<td></td>
</tr>
<tr>
<td>Medium risk</td>
<td>Limited community spread, Contacts with no COVID symptoms AND symptoms possibly related to COVID, but unlikely, OR Teams needing additional reassurance for AGP cases during public health step-down transition</td>
<td></td>
</tr>
<tr>
<td>High risk</td>
<td>Established community spread, or limited community spread with symptoms in either patient or contacts</td>
<td></td>
</tr>
</tbody>
</table>

Urgent surgery?

Consult ID and delay if possible

Sustained AGP?

Fig. 2: Outpatient ENT procedures: COVID-19 Infection Prevention

COVID risk assessment

| Low risk | No community spread, no symptoms in patient or only those expected for surgical condition |
| Medium risk | Limited community spread, Contacts with no COVID symptoms AND symptoms possibly related to COVID, but unlikely, OR Teams needing additional reassurance for AGP cases during public health step-down transition |
| High risk | Established community spread, or limited community spread with symptoms in either patient or contacts |

Urgent procedure?

Consult ID and delay if possible

Sustained AGP?
Fig. 3: Background information

- Expert opinion in NZ and Australia indicates the risk of transmission is extremely low, even in AGPs.
- A surgical mask, surgical gown and gloves provides 90% of the protection giving high rates of additional security.
- NZSOHNS recognises that surgical teams have residual uncertainty about this risk during the transition phase.
- During this transition, optional pre-op testing gives additional reassurance to some teams.
- Where performed, this testing should be audited and collected in a national, central database to inform the advice for n levels.
- One test is sufficient.

<table>
<thead>
<tr>
<th>Level 1 PPE (droplet precautions)</th>
<th>Level 2 PPE (airborne precautions)</th>
<th>Level 2+ PPE (enhanced airborne precautions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face shield or goggles</td>
<td>Face shield or goggles</td>
<td>Face shield or goggles</td>
</tr>
<tr>
<td>Surgical Mask</td>
<td>N95 mask/respirator</td>
<td>N95 mask/respirator</td>
</tr>
<tr>
<td>Gloves</td>
<td>Double Gloves</td>
<td>Double Gloves</td>
</tr>
<tr>
<td>Disposable fluid-repellent gown</td>
<td>Disposable fluid-repellent gown</td>
<td>Disposable fluid-repellent gown</td>
</tr>
<tr>
<td></td>
<td>Surgical hat and shoe covers</td>
<td>Surgical hat and shoe covers</td>
</tr>
</tbody>
</table>

NB: Whilst the greatest risk during AGP is to closest to the aerosol; for consistency it is in everyone in the room or theatre use the same exception of PAPR, the use of which should be discussed with the COVID theatre coordinator.