FFP3 Masks With Valves should be avoided to reduce risk to patients during close interactions when a clinician is unknowingly COVID Positive.

Patrick Magennis – BAOMS Chair, Nirmal Kumar President ENT UK  (13 May 2020)

Background

A recent paper highlighted that clinicians may be completely without symptoms but still be COVID positive. Asymptomatic health care workers represent a risk to colleagues and patients. The risk to other health care workers can be mitigated by good hand hygiene and social distancing. Consideration must be given to the risk to patients especially where close proximity is required over an extended period, for example providing surgical care to the face and mouth.

Not all masks offer the same protection for patients. We would like to highlight this important detail for our colleagues.

Valved FFP3 Masks may represent a risk by directing unfiltered breath at a patient

As clinicians may be COVID positive without any symptoms, the role of PPE for patient protection should be considered when procedures are planned.

FFP3 masks which have an exhalation valve may be more comfortable for the user but, by design, they allow unfiltered breath to be directed at a patient during close contact.

The viral aerosol generated by speech, a cough or a sneeze is thought to be very small. Lower amount of viral aerosol and shorter duration of the task may make the x4 reduction of viral exposure provided by a visor and a surgical mask sufficient risk mitigation where there are no additional risk factors.

In contrast a FFP3 mask with a valve, especially when used without a covering surgical mask or full face visor, will not provide any protection for the patient from an unknowingly positive clinician. The difference for the patient if a valve is present between the theoretical benefit of an FFP3 Mask (x100 reduction of aerosol) compared to the protection provided by a water resistant Surgical mask (x4 reduction) does not exist.

We would recommend that clinicians should not use a FFP3 mask with exhalation valve when undertaking any close patient interaction.

If your only available FFP3 mask has an exhalation valve, you should consider using a surgical mask to cover it to protect the patient as well as the extending the masks use. An unvalved FFP3 mask would be better.

Continuing Advice for the COVID Era

In our advice on 19 March, 24 March and 22 April 2020 we stressed the importance of using appropriate PPE, Avoiding non-emergency procedures, Restricting those exposed to risk and Abbreviating the duration of any procedure.

We continue to recommend that your patient pathways should be designed to use any PPE efficiently and safely. If a whole session is unlikely to include an AGP, then you should consider the balance of risk/benefit between using a waterproof surgical mask under the visor for short examinations or treatments with low AGP potential. Doffing is one of the higher risk activities.

We have stressed before that the mask is a single element of PPE and may not be the most important. Careful patient pathways and excellent infection control behaviours have been shown to reduce transmission in both directions more significantly than use of PPE.

Where close patient contact is expected, masks should be used with eye protection (ideally a full face visor) and as part of an overall infection control plan. This plan should combine PPE, Avoiding unnecessary activity (including unnecessary use of or changes of PPE – donning and doffing), Reducing the number of people exposed to risk, and Abbreviating any procedure by using the most experienced and skilled person to undertake the whole patient pathway (PARA). The most efficient patient pathway should be used to reduce risk to both patient and clinician.

No patient pathway can be considered independent of the risk created to others by inefficient use of all types of PPE. No PPE provides complete protection. There is always a balance between risk and benefit.