

Sent: Tuesday, April 28, 2020 12:23 PM

Subject: Protection with PPE's and Patient Triage - they got you covered

Good afternoon,

Some reflections on information collected over the last couple of months that may be useful as we begin the path back to work – and may add some level of comfort as you step into the fray.

Every additional protocol that is added increases the level of protection for you and your staff when in fact any ONE of them may provide enough separation from the virus load to not allow transmission.

1. Patient triage to eliminate all positive people or those with symptoms so the person would have to be one of the non-symptom infected. Non travelers on PEI are very unlikely to be infected as we have had NO community spread. This in and of itself will eliminate from a statistical perspective a huge amount of virus.
2. PPE - The N-95 and in fact the L3 mask will cut out the vast majority of any virus that actually gets to the mask when you inhale. The face shield keeps any droplets away from the mask. Your gloves when properly worn and discarded along with the normal hand washing and avoidance of face touching precludes transfer to your airways. Same with gown and any other physical and distancing protocols. This too removes a lot of the risk on its own.
3. Non AGP - The creation of dental aerosol is a worry as it whips up the virus into the air and allows it to be introduced into the operators air way - not using aerosol creating techniques and equipment means this will not occur. Good at an initial phase when the actual spread in the general population is unsure. If a handpiece it used - slow - slow speed and Hi VAC suction to remove air from around the handpiece. This results in another reduction in virus if there.
- 4 AGP - These procedures are relatively more likely to create aerosol of the virus but - the PPE will protect you from it. Additional procedures especially placement of a rubber dam well sealed on the tooth almost eliminates virus on that tooth and contact with saliva that creates the possibly infected aerosol.
- 5 If you add to the procedure patient rinsing for 30 seconds with H2O2 to kill the virus in the mouth prior to beginning - less virus there to spread. Then - swab the tooth and surrounding area with Sodium Hypochlorite and/or H2O2 to kill the virus in that area and using the HI-VAC suction - use the high speed and open the tooth for RCT. No virus load getting into the aerosol to be spread.

Because of the cumulative effect of all the separate processes, remembering that at any point any one may eliminate the virus load and the risk, the total effect is probably as much as you can possibly do short of operating inside a bubble suit on a patient in a plastic isolation cocoon through shoulder length gloves - gets a little silly in a hurry.

The addition of a negative pressure environment, while it could in some cases reduce the viral load if the patient is positive or coughing etc with symptoms - in the vast majority of situations we will see it is overkill. The one thing it may do if there is a concern that the virus is in the air is the time the room has to sit before it can be disinfected but in many countries they are not being used nor required.

Would strongly recommend taking some time to absorb information and allow it to help you feel more at ease returning to work and if it does great. If not = stay at home until the external factors with social distancing etc are reduced. We are probably, other than New Zealand and some of the other island countries, in a unique position where the odds of infection are VERY low with NO protection as it is simply not here in the numbers it is everywhere else.

Take care of each other out there - stay healthy and sane = think positive thoughts and believe it = this will come to an end.

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