LETTER Dr KHALILI 20.3.2020

Onderwerp:   
  
We continue to hear reports from China, Italy, and Iran about the high rate of COVID-19 transmissions to otolaryngologists including a number of deaths.  A single transnasal pituitary endoscopic case in Wuhan reportedly infected 14 people who were in the OR.    
   
It turns out that endoscopic sinus and skull base surgery is likely the #1 most dangerous procedure.  Virus density is greatest in the nose and nasopharynx.  The surgery involves application of sprays as well as use of powered debriders and shavers, and drilling – all of which aerosolize clouds of vapor including infected mucosal elements.  It is likely that infectious microdroplets spread throughout the operating room environment.  Studies have shown that viable virus may remain in aerosol droplets for several hours.  
   
Performing endoscopic transnasal surgery without pre-operative knowledge of COVID-19 status is like playing Russian roulette with the health of the entire operative team.  We feel strongly that transnasal endoscopic procedures should NOT be conducted without preoperative COVID-19 testing.   
   
In addition, we recommend that determining preoperative COVID-19 status should be prioritized for all procedures involving the upper and lower respiratory tract, and eventually all patients requiring endotracheal intubation.  In COVID-19 positive patients, endoscopic sinus cases should be conducted only with PAPR.  
   
Dr Fernandez-Miranda and Patel have an endoscopic skull base tumor with declining vision scheduling on Friday.  Hence the urgency of this request.  
   
Thank you for elevating the priority  
   
Rob Jackler  
   
   
From Zara Patel to Sam Wald on need for preoperative COVID-19 testing in endoscopic transnasal surgery.  
   
Thank you for everything you have done and are doing to ensure our safety and the safety of our patients during this challenging time.  
The last two days of accumulating information and data from studies and from our colleagues in China have been quite sobering for our team.  
   
Many tertiary care hospitals in the US are now requiring N95 masks for even routine endoscopy in the office setting, and having us reduce this down to only occurring with urgent visits.  As you may know, we in our ENT clinics are currently doing this.   
Our neurosurgical colleague Dr. Tong, serving in one of the hospitals in Wuhan, has informed us that the first case with the most widespread infection was an endoscopic pituitary case.  All 14 people who came in and out of the OR during that case became infected. He saw this repeat with other endoscopic cases. He has also told us that the majority of doctors who died in China were ENTs and Ophthalmologists, due to the high viral shedding from the nasal cavity.  
This logically makes sense to us based on data showing higher viral load in nasal swabs than lower in the respiratory tract, as well as the knowledge that if the viral particles become aerosolized , which appears possible during endoscopy (let alone endoscopic surgery, where the epithelial lining is actively being disrupted), they stay in the air for at least 3 hours, if not longer. (We are happy to send along this data, if you have not already seen it).  
   
He has further counseled and warned that he believes endoscopic endonasal cases are the highest risk cases for spread of infection.  
Based on their experience in Wuhan, N95 masks were not enough to control this spread. He not only advises, but strongly implores us, to use PAPRs during these cases, if we are truly going to protect ourselves and our teams. He also explained that testing twice appeared necessary, separated by 24 hours in between, to truly confirm negativity to covid19.  
   
Based on this information, and much discussion within our team, we are further culling our planned surgical cases down to the absolute bare minimum, and counseling our patients who we have considered urgent up to this time that they should be in contact with us for any sudden changes in status that would necessitate intervention before we have further information and supplies.  
However, there do remain some cases with acute worsening of vision or other morbidity that would be irreparable if we do not proceed, both combined Neurosurgical/ENT cases as well as some solo ENT cases. For these cases, we would request testing x 2, starting four days prior to OR, so we have the full 24 hours needed for the results separated by 24 hours in between. (Obviously this will not be possible for those cases scheduled this week, but moving forward appears to be important.) We also would request full PAPRs for ourselves and all team members in the OR for any of these cases that do actually need to move forward, either for cases in which we cannot wait for this testing (next two days and emergencies in the future) or for cases that test positive but still need to proceed.  
We understand that these are in even shorter supply than the N95s, but we also feel strongly that they are necessary for our safety and the safety of our teams. To not heed the cautionary advice of those who have already gone through this and lost their own colleagues, does not seem wise or prudent.  
   
Thank you for reading our concerns and requests.  
Hope you stay safe and healthy during this time.  
   
    
   
  
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