Ocular Pathology recommendations during COVID-19 (AAOOP)

With the COVID-19 outbreak, it is important to be aware of possible exposure to the virus in the ocular pathology practice. We should always be aware that any specimen may be a source of infection.

In general pathology, there have been cases described where patients who were asymptomatic and had lung resections for tumor subsequently tested positive for COVID-19.

No transmission has been documented to pathologists as of yet, but it is essential that we protect ourselves from the possibility of exposure.

There is highest risk of exposure at time of frozen section, when handling fresh, unfixed tissue. In the general pathology scenario, lung/respiratory, nasal and oral mucosa specimens are the most critical specimens to be protected against and all trainees, staff, pathology assistants, and histotechnologists in frozen section areas should wear personal protective equipment (PPE), at least surgical masks and eye protective glasses, but preferably N95 masks when handling these specimens. Wearing at least a surgical mask when handling fresh lung tissue has always been stressed, long before COVID-19.

Frozen sections for ocular pathology specimens of highest risk would be conjunctiva, nasolacrimal system, nasal and sinus specimens but any other fresh ocular tissue is potentially infectious.

It is then recommended that if a frozen section is really needed and indicated for conjunctiva, nasolacrimal system, nasal and sinus specimens in which the surgery would change at time of intraoperative diagnosis, the same precautions should be taken as for respiratory specimens: all trainees, staff, pathology assistants, and histotechnologists in frozen section areas should don PPE, at least surgical masks, but preferably N95 masks when handling these specimens. It is also recommended that ocular pathologists adhere to their own frozen section’s laboratory guidelines for the era of COVID-19 for any specimens they process.

In ocular specimens where there is the need to exclude infectious process; the specimen should be divided in the operating room into the specimen for Microbiology and the specimen for Pathology. Submit the fresh specimen to microbiology DIRECTLY (not to frozen sections or pathology) and the other specimen immediately place in FORMALIN for pathology.

Always follow guidelines of your own pathology department but these are specific common scenarios in which specimens in eye pathology should be considered for special handling.
For up-to-date guidelines on CDC recommendations for laboratory COVID-19 biosafety please refer to the following website link:


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