

Guidelines for Handling and Processing Histopathology and Cytopathology

Samples

(Gradual exit from corona pandemic)

- Please adhere to the following standard personal protective measures when handling samples
- Use personal protective equipment (PPE) (See attached ministry guideline “cor virus Lab guidelines MOH latest” for relevant equipment, donning and doffing pgs 5,6,7,8)
- Maintain social distance and wear masks at work place.
- Reduce staff in places where procedure is performed – FNAC/FROZEN
- Hand cleaning.

Personnel protection

1. Use designated sink for hand washing in the laboratory.
2. Wash hands as frequently as possible when and after handling bio – risk samples.
3. Laboratory benches including cut-up bench is to be disinfected with 0.1% sodium hypochlorite at least 5-6 times a day.
4. Clean entry doors/exit door handles with alcohol frequently.
5. Do not take the laboratory coat outside the laboratory
6. Covered laboratory shoes must be worn.

Patient handling

1. Make arrangement to get the samples delivered to laboratory by hospital staff.
2. Issue the reports to the respective wards or clinics using laboratory/ hospital staff – so that patients do not have to come to laboratory to collect reports.
3. Prevent patient crowding at the laboratory entrance by taking suitable measures (eg. increase staff at reception to attend patients as quickly as possible / advise social distancing)
4. Restrict patients entering the working area of the laboratory

Sample reception

1. Accept all samples including fluids in the cut up room/biosafety cabinet /grossing station – according to availability.
2. Use gloves in both hands
3. Do not touch anything else -eg. Phone- with the gloved hands.
4. Wear a medical mask
5. Wear laboratory coat and /or plastic apron

Spillage of fluids / samples

- Clean while wearing PPE and by using gauze/ cloth with 1% Sodium Hypochlorite solution, discard into a yellow bag and seal the bag before dispatch.

Histopathology sample

- All samples should be sent in adequate volumes of 10% formalin. The samples without formalin will not be accepted.
- Grossing and processing to be done at least 24 hours after formalin fixation
- All request forms should state the COVID 19 status – positive, negative, not investigated
- Adequate precautions to be taken when slicing mastectomies and opening large specimens.

FNAC / Cytology (consider all patients potentially infectious)

1. Routine FNAC can be done on an appointment basis. Get down patients on a particular day (once or twice per week depending on the case load) and perform FNAC in a separate room / area with PPE. Consider using phone for giving appointment / triage.
2. Recommended PPE are – N95 mask, water proof gown, face shield/goggles, and double gloves.
3. FNA on a confirmed or suspected case should be avoided where possible. Please take proper history and exclude fever, sore throat, cough etc and any contact history of COVID 19
4. Respiratory cytology sample
Sample should be handled in a biosafety cabinet.

PPE – N95 mask, face shield, goggles, plastic apron, double gloves.

5. Sample container opening and centrifuging fluids - Follow all the above measures (Please do not open the lid of centrifuge before it stops, wait for 20 minutes before opening or if bucket can be separated open inside a biosafety cabinet)

Frozen sections

- Communicate with clinician for COVID 19 risk status - Frozen section on a confirmed or suspected case should be avoided where possible.
- If unavoidable perform with personal protective measures as for FNAC(2)
- For specimen from other patients take normal infection control precautions
- Using biosafety cabinet for sample handling is recommended.

Autopsy

1. Performing Pathological postmortem should be avoided if patient has died of fever/ respiratory symptoms etc or any suspicion of COVID -19 infection.
2. Consider each autopsy potentially infectious and use PPE (N95 mask, double gloves, plastic apron, cap, boots, goggles etc).
3. If possible consider performing limited postmortem.
4. Neonatal postmortems – Can be fixed in formalin and performed.
5. Follow forensic pathology guidelines

Disposal of remaining samples and containers

1. Empty fluid and tissue containers are to be decontaminated with 1% Sodium hypochlorite solution and then placed in leak proof, strong yellow bags and sent for incineration or available institutional disposal method.
2. Remaining fluid are to be decontaminated as above and disposed of as above.

Decontamination and disposal of waste

1. After specimens are processed, decontaminate the work surfaces with 0.1% Sodium hypochlorite. Contact time should be at least 10 minutes. Alcohol (e.g. isopropyl 70%, ethyl alcohol 60%) can be used to wipe down surfaces where bleach cannot be used e.g. metal.
2. Equipment should be disinfected according to manufactures instructions with appropriate disinfectants. 70% alcohol can also be used for equipment surfaces.
3. For spillages use 1% Sodium hypochlorite. Contact time should be at least 10 minutes.
4. All disposable waste should be autoclaved and incinerated. If incinerator is available within the premises waste could be directly sent for incineration.

References:

1. Interim Laboratory Biosafety Guidelines for laboratories - For personnel, Handling samples or materials associated with the 2019 Novel Coronavirus (2019-nCoV)
2. BMJ Best Practice COVID 19
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1240032>
4. https://www.rcpa.edu.au/Library/COVID-19-Updates/COVID-19-Useful-Resources/Docs/RCPA-advice-to-APs-and-FPs-COVID19_April2020.aspx
5. <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwjykJHewJfpAhUdyjgGHWFICWAQFjAAegQIAhAB&url=https%3A%2F%2Fwww.rcpath.org%2Fprofession%2Fcoronavirus-resource-hub.html&usg=AOvVaw0kccJnAZ-pkNty8DYYen8E>