

Clinical Pathology at The Heart of the Triage of Cancer Patients during COVID-19 Pandemic

Ahmed Samir Abdelhafiz¹, Mona Wassef¹, Fayek Ghakeb¹

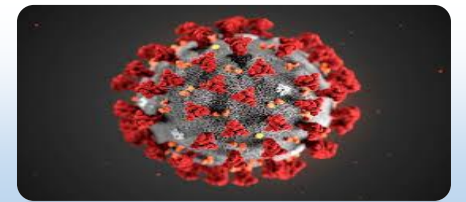
1. Department of Clinical pathology, Shefaa Al-Orman Hospital, Luxor, Egypt.

Corresponding author: Ahmed Samir Abdelhafiz. Email: ahmed.samir@nci.cu.edu.eg

➤ **Background:** Shefa Al-Orman is the only specialized cancer center providing free cancer treatment in Luxor governorate in Upper Egypt. The hospital served about 26,000 cancer patients over the period of 5 years.



➤ **Aim:** When the first case of COVID-19 appeared in Luxor, the hospital applied strict infection control measures and strategies for triage of patients, which were implemented and updated regularly. The clinical pathology department was the heart of different triage strategies. Here we present an highlight the role of the clinical pathology lab in these strategies.



➤ **Methods**

○ Triage strategy number one (March to May): Relied on using a questionnaire for symptoms and measurement of temperature. Complete blood count (CBC) and chest X-ray were ordered for suspected cases. If cases show lymphopenia or suspected lesions, this was followed by PCR and isolation.



○ Triage strategy two (from June later on): New tools in the triage of patients were used. This was done through integration of laboratory data (Serology for detection of SARS-COV-2 IgM and IgG, CBC, and inflammatory markers such as CRP and ferritin), and radiological data provided using chest CT scan.



○ If urgent surgical cases were positive by serology, PCR was done, and strict precautions were applied during and after surgery.



➤ **Results :** From June to October, 1241 cases were screened using this system. 36% were positive using by serology. Positive or suspected cases were sent for isolation for two weeks. Using these strategies, the hospital didn't suffer from any outbreaks of COVID-19 among patients or staff..



➤ **Conclusions:** Laboratory services played an integral role in the triage management during COVID-19 pandemic. Successful integration of these services with the infection control plans could lead to mitigation of the effects of rapidly spreading disease such as COVID-19 on health services provided for critical patients such as cancer patients.

