COVID-19 poses a dynamic clinical challenge as it evolves daily. Based on some research and analysis, it is highly recommended to intentionally postpone schedules of cancer surgeries including chemotherapy. Unfortunately, we don’t have sufficient evidence to go by except for one that has been published by Lancet in February from Chinese experience treating 18 patients with cancer. While we don’t have much data on how COVID-19 impacts on cancer patients, those undergoing active cancer treatment such as surgery and chemotherapy, may be very vulnerable to more severe illness when associated with COVID-19.

COVID-19 positive patients succumb to multiorgan failure more than just respiratory failure which is attributed to the widespread distribution of angiotensin-converting enzyme 2 (ACE 2) expressed by epithelial cells of the lung, intestine, kidney, and blood vessels which becomes a target of the coronavirus. The expression of ACE 2 is also substantially increased in diabetic and hypertensive patients who are treated by ACE inhibitors, resulting in an upregulation of ACE 2. Data suggest increased ACE 2 expression in diabetes and treatment with ACE inhibitors such as those with hypertension. Therefore, it is hypothesized that DM and hypertensive patients apart from being immunocompromised are at high risk of developing severe and fatal COVID-19 especially when they are receiving ACE inhibitors.

Although “Patients with cancer are more susceptible to infection than individuals without cancer because of their systemic immunosuppressive state caused by malignancy and anticancer treatments such as chemotherapy and surgery,” advised by Wenhua Liang, MD of Guangzhou Medical University. Their team reported only 18 cancer patients infected with coronavirus and 39% were at significantly higher risk than those who did not have cancer. These events included rapid deterioration, invasive ventilation and eventually death. The majority of these patients had lung cancer with a significant smoking history.

Based on their experience, they recommend 3 major strategies:  

1. Intentional postponement of adjuvant chemotherapy or elective surgery for stable cancer should be considered in endemic areas.
2. Stronger PPE should be made for patients with cancer or cancer survivor.
3. The use of intense surveillance or treatment should be considered when patients with cancer are infected with coronavirus, especially older patients and those with other co-morbidities that are at high risk (DM, hypertension, cerebrovascular diseases).

Meanwhile, Mount Sinai in New York where a deluge of COVID-19 cases is also concerning, resorted to rescheduling of cancer, routine and non-urgent appointments to May to minimize the risk for patients and exposure of healthcare workers to COVID-19.

While Singapore, as one of the countries with a proliferation of COVID-19 cases but has managed to flatten the curve with strict quarantine and contact tracing, cancer surgeries continued as normal. They have also shed light on operating room management for COVID-19 cases requiring surgeries.

In summary, currently, limited evidence remains insufficient to warrant total cancellation of elective surgeries on cancer. In endemic areas outside of Wuhan and Lombardy, a decision on whether or not to postpone cancer treatment including surgeries are recommended to be made on a patient-to-patient basis based on risk factors and underlying co-morbidities as mentioned above because delay in treatment leads to tumor progression and ultimately poorer outcomes.

References

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