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Correspondence

Unchanged surgical management of patients with Cholangiocarcinoma during the COVID-19 pandemic



In the first months of 2020 the world faced a viral respiratory disease outbreak related to coronavirus SARS-CoV-2, which was declared a pandemic by the World Health Organization (WHO) on March 31st. To date nearly 4 million cases have been documented and a quarter of a million deaths reported globally.

Italy was one of the first western countries to be hit by 2019 coronavirus disease (COVID-19), especially in northern regions of Lombardia [1] and Veneto; the first Italian COVID-related death was reported on February 21st in Vo' Euganeo, a little village in the province of Padua, in Veneto region [2,3]. Since that day, delays in activating measures for epidemic control, inside and outside the hospital, allowed the virus to spread rapidly, as new cases and death toll started to grow rapidly.

Although “navigating the uncharted” [4], national and regional authorities were forced to develop a new project to redistribute resources in order to increase the number of healthcare professionals and structures devoted to the pandemic, and to provide adequate personal protective equipment (PPE) to all healthcare workers. Some suburban hospitals became exclusively COVID-19 dedicated, while others were properly re-organized for admitting both infected and non-infected patients.

In Padova University-Hospital, two additional ICUs were opened, while an Infectious Disease Unit, a sub-intensive Pneumological Unit, two Internal Medicine wards and two out of four ICUs were devoted to COVID-19 patients' care. Moreover, an external triage area was set up to care for patients waiting for COVID-19 screening tests; non-urgent procedures, including surgical operations, and outpatient clinic visits were canceled and, when possible, replaced with a Telemedicine system.

The main goals of the health care system plan to face COVID-19 emergency were to prevent hospital saturation by COVID-19 patients (especially ICUs), to prioritize surgical and clinical activities in order to avoid the use of ICU beds, and to keep safe chronic patients from infection, especially oncologic and immunocompromised patients.

Giving that all resources were put on the management of this emergency, many other clinical and surgical activities have been left aside. For instance, a reduction of the North-Italian Liver Transplant Centers activities was seen, both in terms of outpatient activity (pre-transplant evaluation and transplant recipient follow-up) and of transplant activity, due to donor shortage (23 liver transplants in the first weeks of March vs 60 in the same period in 2019). [5]

In the setting of Surgical Oncology of hepatobiliary tumours, surgical treatment cannot be delayed, as the risk of waiting list drop-out due to tumor progression is very high. As far as Cholangiocarcinoma (CCA) is concerned, surgery can offer a 5-year survival rate of 20–40%, versus 0% of 5-years survival rate if no radical resection is amenable. [6] Unfortunately, only 20–25% of patients are appropriate candidates for curative resection and major hepatectomies with caudate lobe and *en-bloc* biliary resection, hepaticojejunostomy and lymphadenectomy are usually required. In our Unit, during the COVID-19 pandemic, surgery for CCA did not lose its prominent role in our activity because of the Hospital prioritization plan, which allowed a reduction of non-oncological elective surgeries and the activation of additional ICUs, as mentioned before.

From February 21st to May 4th 2020 we performed 12 liver resections for CCA: two laparoscopic major liver resections, one robotic left hepatectomy with tetra-ductal jejunostomy, one extended right hepatectomy with simultaneous Whipple's procedure, four minor open liver resections and four major open liver resections.

Median operative time was 555 min (105–889). Nine patients (75%) needed ICU postoperative monitoring, for a median 2 days (1–5) permanence; median hospital stay was 11 days (3–56).

In the same period in 2019 we had performed 10 liver resections for CCA: one laparoscopic left hepatectomy extended to segment one, six major open liver resections and 3 minor open liver resections.

Median operative time was 415 min (260–770). Eight patients (80%) needed ICU monitoring, for a median 1 day (1–5) permanence; median hospital stay was 14 days (7–91). (Table 1)

Despite the SARS-CoV-2 pandemic with its enormous burden weighting on the National Health System, we were able to maintain our surgical activity for cancer. This was the consequence of difficult but successful choices in terms of prioritization in surgical oncology, mainly based on considerations about aggressiveness of tumor, presence of alternative treatments and surgery-related benefit.

Given that the evolution of the pandemic is largely unknown, the main future task will be to balance between COVID-19 and non-COVID-19 related diseases management, with an adequate allocation of health care resources. In case of a second wave of the pandemic, pre-emptive measures should be started, in order to preserve oncologic surgery interventions or improving means of long-distance consultation and data-sharing.

Table 1

Year	Liver Resection for CCA	Median Operative Time (min)	Number of pts needing ICU	Median ICU-stay (days)	Median hospitalization (days)
2020	12	555 (105–889)	9 (75%)	2 (1–5)	11 (3–56)
2019	10	425 (260–770)	8 (80%)	1 (1–5)	14 (7–91)

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