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EDITORIAL

Global impact of the COVID 19 Pandemic in Portuguese Thoracic Surgery Centres

Mankind is now faced with an unimaginable worldwide health crisis that threatened throwing us back to the dark ages. A new virus, in a naive population, with a mortality not seen since the Spanish flue!

In Portugal, health and civil authorities tuned in to determine early confinement measures, with massive information campaigns for the public that turned Portugal into a case study of successful pandemic crisis containment.

From the moment the virus was detected in Portuguese territory, the focus of National Health authorities was preparing the Portuguese Health Service to face an epidemic spread, similar to Italy and Spain, acquiring stocks of ventilators and individual protection equipments, and reassigning and preparing health staff for covid patient care.

For a moment, all else seemed to stop!! Outpatient clinics of primary care and hospitals were closed as were Radiology clinics in public and private institutions. Operating theatres reduced activity to minimal emergent cases in preparation for the worst case scenario.

Fortunately, so far, the worst did not come! Health authorities worked alongside local hospital administrations to organize parallel pathways, for non-covid patients with urgent health issues.

Priorities had to be set for oncological patients, assuring they got the care they needed in time. Screening all candidates for invasive procedures, was the first step, but many centers ceased exams like fiberoptic bronchoscopy, rigid broncoscopy, and pulmonary function testing, due the aerosols generated during these interventions, delaying the diagnosis and pre-operative exams of lung cancer patients.

But after the initial stand still, guidelines and recommendations started coming out, on how we could make it work for our patients.^{1,2}

The medical oncology Council restated the importance of keeping the diagnostic exams working for the oncological patients as well as the treatment of such patients, in all stages, both with curative intent and

palliative treatment, so as not to shorten overall survival nor worsen their quality of life.³

The National Lung Cancer Group (Grupo de Estudos do Cancro do Pulmão – GECP) in a joint task force with the Pulmonology Society (SPP) reinforced these recommendations that both surgery and radiotherapy must keep their due schedule for intervention.²

The Portuguese National Health Service is mostly organized in Hospital centers that joined several hospitals under one administration for better management. This allowed for the creation of the theoretical Covid-free hospitals, like in Centro Hospitalar Universitário Lisboa Norte (CHULN), where the Pulido Valente Hospital decreased its activity, due the need for contingency plans, but kept its operating theatre (OT) working for oncology and urgent cases. Some shortage of personnel, especially Anesthesiologists, was felt due to the reassignment to reinforce the Intensive Care Unit staff, and contingency plans were devised to assure all essential tasks, but the outpatient clinics was closed, and the telephone contact became the novel modality of medical appointment. Contact was always maintained with the usual referring doctors by e-mail or postal mail, increasing an already established way for referral of distant patients for all new cases.

Like many countries, some areas were hit harder, being that the north of the country had the biggest impact.

In Centro Hospitalar Universitário de São João (CHUSJ) in Porto, the first portuguese epicentre of Covid19 Pandemic, all routine appointments and surgeries were suddenly largely reduced. The main OT (with 11 rooms for several specialities, including Thoracic Surgery) was partly set to house ventilated covid patients, only 3 rooms remained for elective surgeries. Emergency operating theatre was used for covid patients needing urgent surgeries, whereas non-covid patients requiring urgent surgery where operated in two rooms in the main Operating Theatre.

Thoracic oncological surgeries were maintained in Cardio-Thoracic Department OT (where 1 out 3 rooms



was kept in use). Although reducing the total number of thoracic non-cardiac surgeries, CHUSJ was able to operate the oncological thoracic patients with the same cadency in normal programme, but additional surgeries were also suspended during the pandemic period. Besides, a lower number of lung cancer patients were diagnosed, staged and referred for surgical treatment compared to usual.

In our national center for lung transplant, in Centro Hospitalar Universitário Lisboa Central – Santa Marta Hospital, in Lisbon, defined as a non-covid Hospital, priority was set for urgent and emergent cases only. Since the beginning of the emergency state, there was a drastic reduction of lung donors' referral. This allied to delay of triage of the donor and recipient for covid-19 led to a 50% decrease in lung transplant.

A brief survey of the major Thoracic surgical centers in Portugal revealed a global picture of the impact on the surgical activity that during this period was restricted to oncological and urgent cases. Comparison of homologous periods of 2019 and 2020 is reflected in table 1.The two non-covid hospitals in Lisbon (H Pulido Valente-CHULN and H Santa Marta-CHULC) had a similar decrease in cases in March, but difficulties in referrals and anestesiologists availability impacted heavily in the operative numbers of April in most centers.

In all centers, priority was given to malignancies, especially to NSCLC, in line with the recommendations of our national College of Thoracic Surgery. Urgent patients

like empyema, pneumotoraces and trauma were resolved as they came along, but a National decrease in referral was felt, especially in April.

With May, came a trend toward deconfinement, with regulated return of normal activities, which have nothing to do with pre-covid daily activities.

Adjustments in the internal circulation paths and symptomatic triage of all patients are a limiting factor in the outpatient clinic, but added to transmit a sense of professional rigor and safety in managing this situation.

In the OR, the safety measures have not changed, with particular care being taken between patients, that invariably delays the turnover of the patients, but as routine settles in, it seems this will be our new normality.

Diagnosis of oncological cases, as many others, is underestimated, with the social confinement, and is expected to rise as the activities return to normal. On the other hand, this generated an even bigger problem with the benign pathologies waiting list.

We have now, as a community, to find ways to recover the time that was lost, while not endangering patients or professionals, but giving the best care we can.

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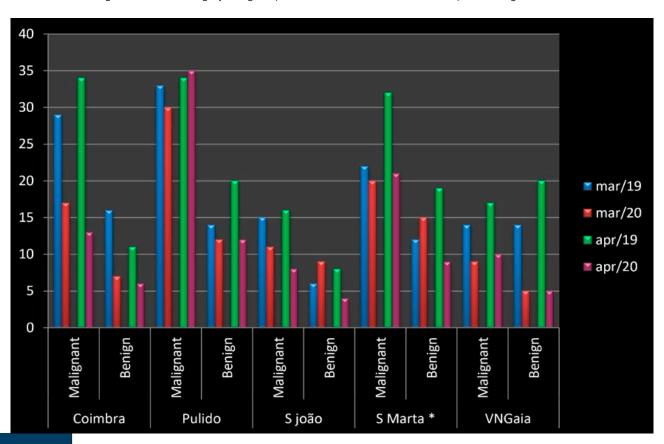


Table1

Operated patients (* includes lung transplants: march 2019 - 2, April 2019 - 2, March 2020 - 0, April 2020 - 1).



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