

# Cardiothoracic Surgery During the Covid-19 Pandemic: Perioperative care, safety and surgical results,

Jorge Casanova<sup>1</sup>, Diana Pissarra<sup>1</sup>, Rita Costa<sup>2</sup>, Elson Salgueiro<sup>1</sup>, and Paulo Pinho<sup>3</sup>

<sup>1</sup>Centro Hospitalar de Sao Joao EPE

<sup>2</sup>Centro Hospitalar de São João EPE

<sup>3</sup>Faculty of Medicine of Porto University

June 22, 2020

## Abstract

**ABSTRACT** Background: COVID-19 was declared a pandemic by the World Health Organization (WHO) on March 11st, 2020. Responses to this crisis integrated resource allocation for the increased amount of infected patients, while maintaining an adequate response to other severe and life-threatening diseases. Though cardiothoracic patients are at high risk for Covid-19 severe illness, postponing surgeries would translate in increased mortality and morbidity. We reviewed our practice during the initial time of pandemic, with emphasis on safety protocols. Methods: From March 11st to May 15th 2020, 148 patients underwent surgery at the Department of Cardiothoracic Surgery of CHUSJ. The clinical characteristics of the patients were retrospectively registered, along with novel containment and infection prevention measures targeting the new Corona Virus. Results: The majority of adult cardiac patients were operated on an urgent basis. Hospital mortality was 1.9% (n = 2 patients). Most of adult thoracic patients were admitted from home, with a diagnosis of neoplastic disease in 60% patients. Hospital mortality was 3.3% (1). Fifteen children underwent cardiothoracic surgery. There was no mortality. The infection prevention procedures applied, totally excluded the transmission of Covid-19 in the Department. Conclusion: While guaranteeing a prompt response to emergent, urgent and high priority cases, novel safety measures in individual protection, patients circuits and pre-operative diagnose of symptomatic and asymptomatic infection were adopted. The surgical results corroborate that it was safe to undergo cardiothoracic surgery during the initial time of Covid-19 pandemic. The new policies will be maintained while the virus stays in the community.

## Hosted file

Cardiothoracic Surgery During Covid-19 Pandemic.doc available at <https://authorea.com/users/335754/articles/461557-cardiothoracic-surgery-during-the-covid-19-pandemic-perioperative-care-safety-and-surgical-results>

## Hosted file

Tables.doc available at <https://authorea.com/users/335754/articles/461557-cardiothoracic-surgery-during-the-covid-19-pandemic-perioperative-care-safety-and-surgical-results>