





## Emergency surgery in the COVID era

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### Abstract

We describe the case of a COVID-positive patient with a clinical diagnosis of acute appendicitis who was a prisoner at a maximum security facility without access to a prison surgical ward. The administrative and legal issues related to admitting and treating this patient on a standard surgical ward are briefly discussed.

**Keywords:** COVID, emergency surgery, acute appendicitis, prison healthcare

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### Case report

A 35-year-old inmate, accompanied by two armed prison guards, presented in the emergency department with clinical signs of acute appendicitis. After a standard preoperative workup he was deemed suitable for an emergency appendectomy. Following hospital policy at the time of the COVID pandemic a PCR test for COVID was performed. The test result was positive. The hospital had a designated COVID operating theatre as well as COVID beds in the ICU and the surgical and medical wards. However, no free beds were available at the time, nor were the wards prepared to allow the armed guards to stay with the inmate during the postoperative period.

Since in the same city there is a hospital of the Ministry of the Interior, the surgical ward of this hospital was contacted in order to receive instructions on how to handle the case (from a legal and administrative perspective, as from a medical perspective the case seemed pretty straightforward).

During a telephone conversation the surgeon on duty at the Ministry of the Interior hospital informed us that they did not have the organizational capabilities to take care of a COVID-positive inmate with the two armed guards that have to accompany the prisoner at all times. They suggested

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that in this situation the standard procedure would be to refer the patient to the nearest prison hospital.

The nearest prison hospital, located 180 km, away was contacted. The physician on duty agreed to accept the patient, but also informed us that this particular prison hospital had neither an operating theatre nor a surgical ward, so the only treatment they could provide the patient with would be non-surgical. Since the diagnosis of acute appendicitis with ensuing peritonitis is a clear surgical emergency, we asked for a prison hospital with a functioning surgical ward. As it turned out, in a country of 38 milion inhabitants, there is only one such facility, and it is located 632 km away from our hospital. Given the medical state of the patient, time spent talking to the other hospitals (three hours) and the impossibility of organizing transport for a COVID-positive inmate with two guards over a long distance, we decided to operate at our hospital.

The operation was performed in a designated COVID operating theatre. A laparotomy was performed. Due to a massive perforation at the base of appendix with severe inflammation of the cecum wall, a right colectomy was deemed necessary. After the operation, due to the lack of free COVID beds and also the legal requirement for two armed guards to be present at all times, one of the rooms in the surgical ward was prepared as an impromptu COVID room with two guards in COVID suits sitting in front of the room. The postoperative course was uneventful, and the patient returned to the maximum security prison after six days.

## *Discussion*

Until quite recently, it was hard to imagine that a case report of acute appendicitis could be published in a contemporary medical journal. However, the advent of the COVID pandemic has changed our everyday practice to a great extent [1]. After more than three years we have become accustomed to constantly changing situations in hospitals. The influx of COVID patients, the necessity to test the patients and their families and preoperative difficulties with COVID-positive patients have become a new normal for us. The opening of new temporary hospitals and the creation of designated COVID hospitals on the basis of existing ones was supposed to be a way to prepare the medical community for all possible scenarios [2]. Unfortunately, not everything can be foreseen. The present case is surprising because it shows how one of the most common surgical emergencies can turn into an administrative disaster because of COVID hospital rules. From one point of view, there was a patient requiring surgery, and from another the legal requirement for the constant presence of two armed prison guards. When a COVID

infection was added to this equation it seemed almost impossible to solve [3]. The option that was chosen by our team was far from correct from the point of view of the COVID rules; the guards were exposed to an infected patient for too long and the isolation of the patient was very primitive. However, we feel that a surgical emergency needs to take priority over COVID rules. Sending a patient more than 600 km with a diagnosis of appendicitis seems nonsense [4]. Sending a surgical emergency from a surgical ward to a hospital without an operating theatre seems more like a scene from a Monty Python sketch. Unfortunately, from an administrative point of view these were the right things to do [5]. We decided otherwise and we were happy to save this patient from possible death due to a simple case of appendicitis. Which would be a real tragedy in the third decade of the 21<sup>st</sup> century.

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