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Perspective

Strategies for follow up after hernia surgery during COVID 19 Pandemia

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ABSTRACT

The end of 2019 was marked by the emergence of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). Our problem is centered in the post operative follow up of those patients who underwent an elective procedure immediately before the isolation and those who require an emergency surgery. We outline the measures we have taken to reduce the possibility of spread of the virus.

1. Introduction

The end of 2019 was marked by the emergence of a novel coronavirus, now termed as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) [1]. It has spread rapidly to other areas in China and worldwide [2],[3],[4]. and was declared a pandemic by the World Health Organization (WHO) on 11 March 2020.

The course of the virus is long, and is highly contagious even during the incubation period [5]. Furthermore, there are asymptomatic carriers, approximately 1% of the laboratory confirmed cases of SARS-CoV-infection [6], that may potentially transmit the virus during incubation time [7], that is why the identification and prevention of the infection is highly challenging. In order to that information, many countries declared compulsory social isolation, thus people should stay at home and only leave if it is extremely necessary, Argentina adopted this policy on 20 March.

Surgical care is a key component of any health system. However, during a global pandemic, it is imperative that the surgical workforce will need to adapt. Elective operations were postponed, and, in our hospital, internal policies were implemented in order to reduce the risk of healthcare workers and patients transmission.

Since pandemic declaration in March, the surgical department has rapidly put in place stringent measures to prevent transmission. We do not have any instances of health care workers transmission so far. It is important to prevent the spread of the virus within a department, for essential surgical services preservation to ensure that the department remains functional to carry out our duties.

We are part of the General Surgery Department in a teaching Hospital, specifically the Microsurgery and Abdominal Wall Reconstruction Section. During the early phase of the COVID-19 worldwide outbreak and before the social isolation declaration, we performed more than 50 elective surgeries (Hernioplasties, Eventroplasties, Demolipectomies and Tumor Resections). A large amount of these procedures took place in our Ambulatory Surgical Center, thus allowing an early discharge. Normally we have developed a follow up protocol, that include 2 visits to our office during the first post operative month, (1st week and 4th week after surgery), another visit 6 month after the procedure, and one per year for 5 years since surgery was performed. Due to the pandemia and, local and global measures, we were forced to suspend our medical offices as well as elective procedures. The problem is now centered in the post operative follow up of those patients who underwent an elective procedure immediately before the isolation and those who are in their first month after surgery. Emergency surgeries are less frequent, however were considered when developing preventive measures.

We outline the measures we have taken to reduce the possibility of spread of SARS-COV-2 for follow up and urgent abdominal wall procedures.

2. Measures for the follow up of patients that have been operated before isolation, and those who will require an emergency surgery

- Post operative care recommendations: sent by e-mail or printed (diet, wound care, pain management, physical activity)
- List of possible complications and their need to attend to the hospital
- Home monitoring for patients that have already been operated through phone calls made by one of the surgeons of the team. During the phone call, patients are asked about 7 basic parameters: clinical status; pain management (using a numerical rating scale, in which zero represents ‘no pain at all’ and the upper limit represents ‘the worst pain ever possible’, the feasibility of its use and good compliance have also been proven and is easily possible to administer verbally); bleeding; fever; physical activity; diet tolerance and
wound characteristics [9].

- Implementation of telemedicine for those patients who are familiarize with the use of new technology.
- Patients should attend to the hospital only for major complications, for example, unstoppable bleeding, signs and symptoms of intestinal occlusion, purulent content on the wound, unbearable pain.
- Provide patients a contact number or an e-mail address of one member of the surgical team
- Use of absorbable sutures for wound closure

3. Measures for wall defects emergency surgery

The main goal of this type of surgery is an early discharge from Hospital that will guarantee shorter exposure time with less chance of viral infection. We consider that not every complicated wall defect need an urgent surgery, furthermore, if patients attend to the hospital before 6 hours of initial symptoms appearance, and do not have any occlusion signs, are candidates for reduction maneuvers and early discharge from the emergency room with care recommendations and alarm signs.

Early postoperative discharge criteria (surgical findings):

- No intestinal resection
- Sac content: mostly omentum
- No occlusion signs
- No intestinal suffering signs

Patients who meet these criteria, diet tolerance should begin as soon as clinical condition allows, in order to an early discharge. Hospital stay of 24 hours is the goal for these patients.

4. Conclusion

These measures were adopted early on during the current outbreak. The COVID-19 pandemic is expected to be long drawn and the end of social isolation is unknown. In addition to this, most of them are modifications of follow up protocols that we have already been practicing for Ambulatory Surgery patients. Our surgical workforce needs to be flexible and ready to adapt to any situation. Furthermore, we consider that a shorter hospital stay reduces the risk of infection/transmission not only for patients but also for health workers.

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Declaration of competing interest

There is no conflict of interest.

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