

Research Article

Patient's Perspective Regarding the Elective Surgical Procedure during Covid19 pandemic

Mayank Badkur*, Ashok Puranik, Naveen Sharma, Suruthi Baskaran, Satya Prakash, Mahendra Lodha

Department of General Surgery, All India Institute of Medical Sciences, Jodhpur, Rajasthan, India

***Corresponding author:** Mayank Badkur, Assistant Professor, Room No. 521, 5th floor OPD block, Department of General Surgery, All India Institute of Medical Sciences, Jodhpur, Rajasthan, India

Received: 17 August 2021; **Accepted:** 24 August 2021; **Published:** 31 August 2021

Citation: Mayank Badkur, Ashok Puranik, Naveen Sharma, Suruthi Baskaran, Satya Prakash, Mahendra Lodha. Patient's perspective regarding the elective surgical procedure during Covid 19 pandemic. Archives of Clinical and Biomedical Research 5 (2021): 681-688.

Abstract

Context: The ongoing Covid-19 pandemic and the subsequent nationwide lockdown, has impacted all aspects of society including the medical profession. In hospitals, the focus has mainly shifted to prevention and treatment of Covid-19 infection. Owing to this, all elective surgeries are being postponed and only emergent surgeries are being performed. This has affected the patients differently depending on the progression of disease and development of complications.

Aim: The aim of this study is to evaluate the attitude of the patients regarding their planned surgical treatment in view of COVID 19 pandemic.

Settings and Design: Hospital based; Cross-sectional; Telephonic survey

Methods and Material: A well-structured telephonic scripted questionnaire was administered to all patients who were given an appointment for any elective surgery. Data was collected regarding the status of disease including complications and the patient's perspective on the method of treatment. Patients who developed complications or underwent

emergency surgery or surgery elsewhere were excluded.

Statistical analysis used: Collected data was entered in MS Office Excel spreadsheet and analysis was done using SPSS software.

Results: The man to women ratio was 2.3:1. The mean age of patients was 41.16 years. A total of 86 patients were included in the study. Almost all (98.8%) were aware that the lockdown and withholding of elective surgeries were directed to prevent the spread of coronavirus infection. Among 34 patients with progressive disease, 88.2% were willing to undergo the surgical procedure and 73.5% were willing to visit hospital within a week or two. Among 46 patients, who were Willing to continue the treatment on wait and watch policy, 45.7% patients wanted to wait for more than 2 months for their treatment, and 93.5% patients were avoiding hospital visit because of infection.

Conclusions: Patient's attitude towards the choice of treatment (wait and watch Vs surgery) mainly depended on the progression of disease. It is critical, during these tough times of Covid-19 pandemic, that risks are weighed against benefits to decide the line of management for patients waiting for elective surgeries.

Keywords: Covid-19; Pandemic; Elective surgery; Patient's perspective; Wait and watch policy; Telemedicine

Key Messages: An important cohort of patients, who are waiting for their respective elective surgical

procedures and are uniquely suffering in this pandemic without being direct subjects of this catastrophe and are at the risk of being ignored. Strategies should be made to provide maximum benefits to these patients keeping their condition and choices in the center.

1. Introduction

On 31st January 2020, World Health Organisation (WHO) declared the 2019 - 20 COVID -19 outbreaks as a Public Health Emergency of International Concern (PHEIC) and on 11th March 2020, it was announced as an epidemic [1]. In India, the first case of COVID- 19 was reported on 30th January 2020 [2]. The Prime minister of India implored the nation to observe Janata Curfew on 19th March 2020 to sensitize the community and announced a nationwide lockdown thereafter to reduce the spread of COVID-19. The Government of India is tirelessly endeavouring to spread awareness amongst the general population about the various ways in which corona virus can be contracted and transmitted. The ongoing COVID-19 pandemic and the consequent nationwide lockdown, has impacted all aspects of society including medical profession. In hospitals, the main focus has shifted to treating the deadly Corona virus. Elective surgical procedures, as a result, are being postponed in all hospitals, primarily to save the patients from possible cross-infection from COVID-19 virus and also to utilize the workforce and resources to comply with the unique need of the time. In our Institute, Department of General Surgery had to postpone most of the elective procedures. It is known that though there are certain diseases which require elective surgical intervention, they can be managed by wait and watch policy. However, these

elective surgical procedures cannot be postponed indefinitely. Benign diseases can develop complications or their severity/ grade can increase with time and patient's outcome can be affected severely, leading to morbidity and even mortality. On the other hand, poor outcomes are also reported among the patients who undergo surgical procedures during the COVID 19 pandemic and hospitals can be a potential area to catch the viral infection in these times. All these factors complicate the judgment to proceed for surgery for benign disease. The line between risk and benefit is thin and patient's perspective in this delicate decision has to be weighed. Being an esteemed institute nationally, the waiting list of patients who required elective surgeries for their diseases was long and appointments were given up to two months ahead. In view of extended lockdown, telemedicine consultation was started and this gave us the unique opportunity to telecommunicate with the patients to understand their suffering, their level of awareness and their attitude towards the proposed treatment in view of COVID- 19 pandemic.

2. Subjects and Methods

After approval from the Institutional Ethics Committee (IEC), a telephonic interview-based survey was done between 20.05.2020 and 25.05.2020. Participant's telephonic consent was obtained regarding the study. A well designed Total 108 patients were waiting for their surgery when lockdown was initiated on 23rd March 2020. Among these patients, man to women ratio was 2.3:1. The mean age of patients was 41.16 years, ranging from 19 yrs. to 74 yrs. The common diagnoses of patients waiting for surgery included carcinoma

telephonic scripted questionnaire was used. An experienced general surgery consultant performed the telecommunication and participants were allowed to response their views freely in their language. Qualitative assessment of the responses was done by the team of the experts and then the data was summarized in a prefixed Performa for each participant. All patients, who were given appointment for elective surgical treatment of their benign diseases from 23.03.2020 to 31.05.2020, in the Department of General Surgery, but could not undergo the procedure because of lockdown, were involved in the study. During the interview, patients were asked about the status of their disease and their complaints were evaluated. Patients with stable diseases (where signs and symptoms were similar at the time of consultation in surgery OPD) and progressive diseases (uncomplicated disease, where signs and symptoms increased in severity or caused some difficulty in daily routine activities as compared to the time of consultation in surgery OPD) were included and Patients who underwent surgical treatment elsewhere, developed severe complications or required emergency surgery were excluded from the study and appropriate treatment advice was given to them. Collected data was entered in MS Office Excel spreadsheet and analysis was done using SPSS software.

3. Results

breast (2.8%), cholelithiasis (13.0%), epigastric hernia (3.7%), fissure in ano (1.9%), fistula in ano (16.7%), haemorrhoids (3.7%), inguinal hernia (30.6%), periumbilical hernia (0.9%), Phylloides tumour (3.7%), pilonidal sinus (4.6%), pleomorphic adenoma of parotid gland (0.9%), soft tissue tumour

(2.8%), colloid goitre of thyroid (0.9%), umbilical hernia (0.9%), undescended testis (0.9%), varicocele (0.9%), varicose vein (11.1%). After IEC approval, patients were communicated telephonically. Some (5.6%) patients who did not pick up the phone call, and 6.5% patients who underwent surgery elsewhere were excluded. The remaining 95 patients did not complain of any new disease other than their previous illness but two patients were found to be in isolation because of their contact history. These patients were also excluded from the study. Patients including carcinoma breast and patients developed serious complications were immediately called for emergency treatment and these seven patients were also excluded from the study. The remaining 86 patients were interviewed to collect data. All patients were aware of the COVID 19 virus infection and its mode of transmission. Also 100% of the patients were aware of the nature of progression of their surgical disease and the complications which could arise. Almost all (98.8%) the patients were aware about the lockdown and withholding of elective surgeries. They knew that it was done to limit the

social interaction and to prevent the spread of virus infection. Of the 34 patients who were having progressive disease, 88.2% were willing to undergo surgical procedure and 73.5% were willing to come to hospital for surgery within the same or next week. This was significantly higher than those without progressive disease (52 patients) in whom only 50% were willing to undergo surgical procedure, 38.5% agreed to come to hospital during this period and 71.2% of them were willing to continue the treatment on wait and watch policy as in table 1 Among patients who were comfortable to continue their treatment on wait and watch policy, a maximum of 45.7% of patients wanted to wait for more than two months before the proposed treatment. A significantly higher proportion of these patients (93.5%) wanted to avoid the hospital visit because of infection as in table 2. When questioned if they thought that they would contract the virus infection in the hospital, only 9.3% said “no” whereas 70.9% patients were sceptical and said “may be” and 19.8% were certain of the possibility.

	Presence of progressive disease (n=34)	Absence of progressive disease (n=52)	P value
Willing to undergo surgical procedure that was advised before	30 (88.2%)	26 (50.0%)	<0.001
Willing to come to the hospital for the surgery in this or next week	25 (73.5%)	20 (38.5%)	<0.001
Willing to continue the treatment on wait and watch policy	9 (26.5%)	37 (71.2%)	<0.001

Table 1: Presence of progressive disease and treatment choice

p<0.001 by Chi Square test. All p values calculated using Chi square test. Figures in parentheses represent column-wise percentages.

		Willing to continue the treatment on wait and watch policy (n=46)	Not willing to continue the treatment on wait and watch policy (n=40)	Total N=86	P Value
Duration for which patients want to wait before surgery?	>1 month	13 (26.1%)	0	13	Not calculated
	>2 month	21 (45.7%)	0	21	
	>6 month	12 (26.1%)	0	12	
	No waiting	0	40 (100%)	40	
Patients were avoiding hospital visit because of infection (n=54)		43 (93.5%)	11 (27.5%)	54	<0.001
Patients who were avoiding hospital visit other than infection (like lockdown and travel restriction) (n=32)		3	1 (2.5%)	4	<0.001

Table 2: Attitude regarding avoidance of hospital visit

p<0.001 by Chi Square test. All p values calculated using Chi square test. Figures in parentheses represent column-wise percentages.

4. Discussion

India announced its first case on 30th January 2020 and since then, Indian health system has been continually trying to tackle this unique yet arduous crisis. The Indian Government has worked extraordinarily to contain this infection and to spread awareness among the people. Policies about the functioning of hospital have been designed in consultation with Indian Council of Medical Research (ICMR) and various standard operating procedures (SOPs) have been formulated to maximise the use of available resources. India is one of the most densely populated countries in the world and this directly poses its health system with many challenges. The vulnerable patient population with surgical diseases can be broadly grouped into three categories, COVID positive patients, COVID negative emergency patients and COVID negative

general patients. Where all the arrangements were focused to deal with COVID positive patients and COVID negative emergency patients, COVID negative general patients were mainly provided with alternative options to continue the treatment like telemedicine. In this group, patients who were planned for their elective surgeries were most affected because of the postponement of elective surgeries. On March 20th the Central Government directed hospitals and medical institutions to postpone non-essential elective surgeries up to March 31st and this was to be reviewed “as per evolving situation” [3]. According to a report published in the British Journal of Surgery on May 12th, 28.4 million elective surgeries were cancelled or postponed during the “12 weeks of peak disruption” [4]. In India, this number was expected to be 48,728 per week and about 585,000 over 12 weeks period [3]. Where all

agencies were planning to provide the maximum benefit to the patients, knowing the perspective of these stakeholders (patients) is important to design appropriate strategies. In this study, our main focus was to understand the suffering of this group of patients and to understand the cause of their concern. We found out that 36.6% patients had progressive disease. This fact is alarming because more and more such patients will develop complications or progressive disease and this will increase their morbidity and mortality. Most of the study population was aware of COVID 19 disease and its mode of transmission. A cross-sectional study among general public also showed similar results [5]. Another study done by Roy D also showed sufficient awareness among the general population [6]. They were also aware that the purpose of lockdown was to limit social interaction and to prevent virus infection. They were also aware about the postponement of elective surgeries. This showed that the government's strategies towards the spread of awareness through social media, newspaper and television shows were effective [5]. Also most patients were found to be aware of the progression of their disease and related complications which speaks about the importance of detailed counselling at the time of consultation. Patient's attitude towards the choice of treatment was mostly dependent on the progression of their disease where patients with progressive disease were keen for treatment even during the lockdown period. More than 50% patients wanted to continue their treatment on wait and watch policy. Patients were avoiding hospital visit and many of them were afraid of it because of the risk of infection. This information provides an insight about the impact of COVID 19 pandemic on patient's psyche and suggests the need

for detailed discussion in view of COVID 19 to make a more patient-centric treatment decision regarding their surgical condition. Most patients wanted to wait for at least 2 months or more. This was suggestive of the perception that this disease will be controlled within this time frame. Similarly, in another study, majority (93.02%) of the respondents believed that COVID- 19 would be controlled successfully and had the confidence that our country could fully eradicate the virus as early as possible. This information lacked scientific evidence but showed the positive attitude of general public which is especially important in these troubled times [5]. Keeping a high morale is one thing and facing the reality is another, especially at the time of making a crucial decision about one's treatment. Therefore, General surgeons, because of the wide variety of procedures they perform, are uniquely affected and have to take extraordinary leadership roles which can balance these factors and maximise output. Now that the medical services have resumed to its full functionality, concern related to COVID-19 19 infection are not vanished completely. Resources are still divided to cater the need of pandemic. Surgeons have to analyse and interpret the patient's condition and psyche before deciding the need of treatment as "elective" or "non-essential" [7,8]. Use of technology like telemedicine for consultation and follow-up of the patients can provide great help in patient management. This can provide an alternative to a customary and more intimate patient- physician interaction spatially in surgical practice [9]. If a patient is coming to the hospital, proper measures to protect patient and healthcare workers from the infection should be ensured. Guidelines regarding this can be formed at the individual institutional level, in coordination with

the local circumstances, local and national governing bodies [10].

4.1 Limitation

Sample size was small as this study was done only on the patients in the waiting list of the department of general surgery of one institute. Similar study involving other centres of the country could have given a more substantial data about the outcome. Telecommunication regarding the health issue was a new experience for our population, patient's education status, language and cultural practices impact the outcome of an interview-based study.

Acknowledgement

We want to acknowledge Dr. Akhil Goel for helping in statistical analysis for this study.

References

1. Coronavirus Disease (COVID-19) - events as they happen. WHO (2020).
2. Coronavirus in India: Tracking country's first 50 COVID-19 cases; what numbers tell (2020).
3. Chaitanya MI, Covid-19 held up 5.8 lakh elective surgeries in India. Here's why further delay should be avoided (2020).
4. Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans. *British Journal of Surgery* 107: 1440-1449.
5. Vadivu TS, Annamuthu P, Suresh A. An Awareness and Perception of COVID -19 among General Public- A Cross Sectional Analysis. *International Journal for Modern Trends in Science and Technology* 6 (2020): 49-53.
6. Roy D, Tripathy S, Kar S, et al. Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian Journal of Psychiatry* 51 (2021): 102-108.
7. Paraiso M, Brown J, Abrão M, et al. Surgical and clinical reactivation for elective procedures during the covid era: a global perspective. *Journal of Minimally Invasive Gynecology* 5 (2020): 98-107.
8. Resumption of elective surgeries required to soften COVID-19 blow to healthcare sector: Medical Technology Association of India. *Deccan Herald* (2020).
9. Vogler S, Lightner A. Rethinking how we care for our patients in a time of social distancing during the COVID-19 pandemic. *British Journal of Surgery* 107 (2020): 937-939.
10. Diaz A, Sarac B, Schoenbrunner A, et al. Elective surgery in the time of COVID-19. *The American Journal of Surgery* 219 (2020): 900-902.
11. Mayol J, Fernández Pérez C. Elective surgery after the pandemic: waves beyond the horizon. *British Journal of Surgery* 107 (2020): 1091-1093.



This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC-BY\) license 4.0](https://creativecommons.org/licenses/by/4.0/)