

Profile of Patients Underwent Surgeries at a Secondary Health Institution in North India during COVID-19 Era: A Retrospective Observational Study

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ABSTRACT

Covid-19 pandemic has spread a fear among world about getting being infected more when you come in contact with health care professionals. Health institutions are being considered as high viral load areas and people are avoiding visiting hospitals. Operation theatre are the areas in which health care professional has to come in close contact ignoring the norms of social distancing in procedures viz. airway examination, induction of anesthesia, intubation and extubation etc. In this study we have analyzed the profiles of patients which were operated in our secondary health institution (Regional Hospital Bilaspur). This was a retrospective Observational study which was conducted starting from March 1st till June 25th 2020. Data was collected from Operation theatre records which included surgical specialty, type and nature of surgery. During this period 153 patients were operated which included maximum of emergencies (132) of which maximum were LSCS. Emergency surgeries were the priority in our institution which is in accordance with the guidelines issued for operation theatre by Government of India.

Key words: Covid-19, Gen Surgery, Orthopedic Surgery, OBG surgery.

INTRODUCTION

Covid-19 pandemic is currently affecting whole world population and in India the cases are on rise. During this pandemic various elective procedure which

were conducted in routine operation theatre are currently suspended. Some health facilities have converted into dedicated Covid centers. This has led to significant drop in number of surgeries. Most centers are only conducting emergency surgeries. Due to aerosol generated transmission and inability to test all people for Covid-19, it is of utmost importance to conduct only required surgeries. Operation theatres are places in which there is very close contact with patients. With several documented cases of human-to-human transmissions [1-4] 2019-nCoV poses a high risk to all healthcare professionals in the perioperative setting. We conducted this retrospective observational study at our hospital to look for kind of surgeries which were conducted during this pandemic till now. This study might provide us valuable information regarding essential services which has to be continued to provide Operation theatre services in this covid-19 era.

MATERIAL AND METHODS

This is a retrospective observational study which was conducted between March 1st till 25th June by Department of Anesthesiology at Regional Hospital Bilaspur (Himachal Pradesh). This is secondary level institution which provides operation theatre facility (emergency as well elective) for Gastro-intestinal surgery, Urology, OBG, Orthopedics. All kind of

Anesthesia services are provided (regional as well as general anesthesia). Data has been collected from OT records regarding type of specialty and kind of surgery and anesthesia services provided. Approval from Institution for analyzing the data was taken.

ANALYSIS AND RESULTS

Total 153 surgeries have been conducted during this period out of which 21 surgeries were elective and 132 were

emergency surgeries. Table 1 shows specialty wise distribution of cases. Most of the cases were emergency surgeries. OBG department has done maximum number of surgeries (109) with 88 emergency LSCS followed by Orthopedic trauma which contained mostly closed fractures followed by GIT surgery (19) and urology (5). 71.24 % of surgeries were done in OBG patients followed by Orthopedic, GIT and urology respectively.

Table:1 Specialty wise case distribution.

Specialty	Surgery	Elective	Emergency	Total
GIT	Cholecystectomy	6	1	19 (12.40 %)
	Appendectomy	0	11	
	BTA	0	1	
Urology	Pyelolithotomy	2	3	5 (0.32 %)
OBG	LSCS	10	88	109 (71.24 %)
	TAH	3	-	
	Ruptured Ectopic	-	6	
	Other	-	2	
Orthopedics	Open fracture	-	3	20 (13.04 %)
	Closed fracture	-	17	
Total		21 (13.73 %)	132 (86.27 %)	153

*BTA- Blunt trauma abdomen, LSCS- Lower segment cesarean section, TAH- Total Abdominal hysterectomy, GIT- gastro-intestinal surgery, OBG- Obstetrics and gynecology.

DISCUSSION

Countries are responding to protect themselves from covid 19 in every possible way. Spread of infection is common from health facilities and virus can stay on surfaces for days. To prevent such spreads and protect the resources for critically ill patients, American College of Surgeons (ACS) and the U.S. Centers for Disease Control and Prevention recommend that non-emergency procedures be delayed. [5,6] Similar guidelines have been issued in India regarding delay of non-emergent surgeries. Adhering to protocols most of surgical procedures done at regional hospital Bilaspur were emergency. 86.27% of surgeries conducted were emergency surgeries and 13.73% of surgeries were Elective. In emergency procedure, LSCS were 64% out of total surgeries. None of patient developed any complication in post-operative period. During all surgeries all possible precautions were taken care of to protect health care staff and patients.

CONCLUSION

During this era of COVID pandemic, it is wiser to delay the non-emergency procedures in a limited resource country like India. The resources can be used to treat critically ill patients. LSCS are the procedures which cannot be delayed and should be of top most priority. Other important surgeries are for cancer patients. In our institution onco-surgeries are not done, so patient profile comes out to be mostly of OBG patients. To conclude, we must say that rational use of resources and wise decision making regarding surgeries is of utmost importance in Covid-19 era.

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