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Collateral damage of COVID-19 pandemic: The impact on a gynecologic surgery department

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ABBREVIATIONS

ICUS: intensive care units

CNGOF: French National College of Obstetricians and Gynecologists

Highlights:

- The COVID-19 pandemic was the cause of a significant decrease (65%) of surgical activity during the first French lockdown.
- It was difficult to reschedule procedures, which resulted in delay of patients in semi-urgent operations beyond the interval recommended by guidelines and potential medical risk for approximately 10% of postponed surgeries.

1 ABSTRACT

2 Objective: This study focuses on changes in gynecologic surgical activity at Hospital
3 Foch, Paris, France during the first French COVID lockdown in 2020. Additional goals include
4 the evaluation the extent of the postponement suffered for each type of surgery and
5 estimate the possible negative impact for patients.

6 Study design: Single-center, retrospective, chart-review cohort study in the gynecology
7 department of Hospital Foch. Comparison of all patients scheduled, postponed and operated
8 during the first COVID lockdown (March 14, to May 11, 2020) versus the same period in
9 2019. Postponed surgeries were classified into 4 scheduling interval categories according to
10 the Society of Gynecology Oncology (SGO) recommendations: urgent (without delay), semi-
11 urgent (1-4 weeks), non-urgent (>4-12 weeks) and elective (>3 months) and evaluated to
12 determine whether COVID-19-related delays of surgeries fell within guidelines. The
13 potential “loss of chance” or medical risk associated with postponed surgeries was
14 estimated according to a composite criterion including death, aggravation of expected
15 tumor stages/grades in cancers, increase in surgical complexity compared to that initially
16 planned, need for preoperative transfusions, start of morphine consumption during
17 preoperative treatment for opiate-naive patients, additional hospitalization or consultations
18 in emergency room and delay in treatment when surgery was urgent.

19 .

20 Results: During the 2020 French COVID lockdown, 61 patients had a surgical
21 procedure and 114 were postponed; in the comparator 2019 group, 232 patients underwent
22 surgical procedures, indicating an overall decrease of 65% of activity. Analysis of differences
23 between the two years revealed a reduction of 64% in emergency procedures, 90% of
24 functional pathologies, and 13% of cancers. According to SGO guidelines, the only type of

25 surgical procedures that had excessive delay was the semi-urgent group, where time to
26 surgery was 6.7 weeks [range 5.4-10 weeks] instead of the recommended interval of 1-4
27 weeks. Among postponed surgeries there were 10 patients (8.7%) with a potential “loss of
28 chance” according to the composite criteria, all included in the semi-urgent group.

29 Conclusion: The COVID 19 pandemic was responsible for a significant decrease of
30 activity in the surgical department of Hospital Foch. Difficulty of rescheduling surgeries was
31 responsible for an increased delay in semi-urgent operations. In almost 9% of postponed
32 surgeries, there was a potential “loss of chance”, which likely represents only the tip of
33 iceberg of collateral damages due to COVID 19 pandemic in this surgical unit. These data
34 show the importance of continuing to treat pathologies requiring urgent or semi-urgent
35 surgery during pandemics.

36

37 KEYWORDS

38 COVID-19; delayed surgery; gynecology; loss of chance; medical risk; surgical
39 procedures.

40

41 INTRODUCTION

42 The pandemic of coronavirus disease 2019 (COVID-19) has rapidly spread globally following
43 the first case reports in Hubei province, China. The pressure on hospital wards and intensive
44 care units (ICUs) triggered a massive disruption and reorganization of hospitalization all
45 around the world. Hospital Foch in Paris area, France was required to postpone all non-
46 urgent surgical procedures during the first French COVID lockdown between March and May
47 2020 to sustain adequate hospitalization capacity and health care professional availability
48 for management of patients with COVID-19. Furthermore, some surgical procedures
49 potentially associated with an increased risk of SARS-CoV-2 were deprioritized (e.g. aerosol
50 generation from endoscopy, hysteroscopy) [1].

51

52 The prioritization of patients is a complex strategy that poses several organizational and
53 ethical issues. Since March 2020, numerous recommendations have been published to
54 standardize the urgency of specific indications and recommended intervals of delay for
55 patients who need to undergo surgical procedures, with a goal of avoiding an increased risk
56 of adverse prognosis [2-5]. This study focused on how gynecologic surgical activity changed
57 during the first French lockdown in 2020 compared to the same period in 2019. It also
58 evaluated whether the delay of each type of gynecologic surgery was in accordance with the
59 recommended intervals, and estimated any possible negative impact for patients.

60

61 MATERIALS AND METHODS

62 A retrospective single-center cohort chart review study was carried out in the gynecology
63 and obstetrics department of Hospital Foch, Suresnes, France in the Parisian area. All
64 surgeries performed or initially planned and postponed during the first French Lockdown
65 (between March 14 and May 11, 2020) were compared to surgeries performed during the
66 same period in 2019. Patients scheduled for follicular puncture or Caesarean section or
67 those who were opposed to the use of their data for research purposes were excluded from
68 the analysis. As recommended by the French National College of Obstetricians and
69 Gynecologists (CNGOF), all non-urgent surgeries were postponed during the Spring 2020
70 lockdown [2, 3]. However, nonoperative conservative treatment was initiated for patients
71 awaiting surgical procedures; for example, pharmacological therapies for hormone-sensitive
72 pathologies were implemented (i.e., GnRH agonist in endometriosis or myomas, hormonal
73 therapy for endometrial and breast cancer and chemotherapy for advanced stages ovarian
74 cancers).

75
76 Medical records were reviewed using the hospital's computerized database. The variables
77 analyzed included diagnosis, type of surgery, indication for surgery (cancer, functional,
78 emergency), dates of planned and actual surgeries, and "loss of chance" according to the
79 composite criteria described below, lost to follow-up, operations in another hospital,
80 postoperative complications, main symptoms and changes in management. Data collection
81 ended in October, 2020. The extent of surgical delays were classified according to the four
82 urgency categories defined by the Society of Gynecology Oncology (SGO): urgent
83 (procedures which have to be performed without delay), semi-urgent (1-4 weeks), non-
84 urgent (>4-12 weeks) and elective (>3 months) [5]. These guidelines were edited during the

85 first lockdown in order to prioritize gynecologic surgery. Even if this classification details
86 cancer indications, it also includes some functional gynecologic surgery and emergencies as
87 shown in table 2. We added laparoscopy for extra uterine pregnancy, bartholinitis, breast
88 abscess in the urgent group; discontinued pregnancy treated by curettage (n=9), cervical
89 cerclage in the semi-urgent group; hysteroscopy and myomectomy without hemorrhage,
90 pain or suspected pathology and mastectomy for Benjamin Syndrome in the elective group
91 according to the CNGOF recommendations [3].

92 The negative impact on patients was evaluated using a composite “loss of chance” criterion
93 that included occurrence of any of the following outcomes in the setting of postponed
94 surgery: death, aggravation of expected tumor stages/grades in cancers, increase in surgical
95 complexity compared to that initially planned, need for preoperative transfusions, start of
96 morphine consumption during preoperative treatment for opiate-naive patients, additional
97 hospitalization or consultations in emergency room and delay in treatment when surgery
98 was urgent.

99 Statistical analysis was performed using descriptive evaluation with the median [1st
100 Quartile-3rd Quartile] for continuous variables and percentage for categorical variables.
101 Fisher’s exact test or Chi-square test were used to compare distribution ratios. Microsoft
102 Excel software was used for data recording and analyses were performed using SAS v9.4.
103 This study was approved by the hospital institutional review board (IRB 00012437).

104

105 RESULTS

106

107 During the French first lockdown, 61 patients had a surgical procedure and 114 were
108 postponed; in the comparator 2019 group, 232 patients underwent surgical procedures,

109 indicating an overall decrease of 65% of activity (Table 1). Comparing 2020 to 2019, there
110 was a reduction of 64% in emergency procedures (27 vs 59), 90% of functional pathologies
111 (14 vs 150), and 13% of cancers (20 vs 23). There was also a decrease in the number of
112 curettages (9 vs 26) and bartholinitis (1 vs 11) performed. The proportion of planned cancer
113 surgery was higher in 2020 vs 2019 (20% vs 10%, $p=0.01$). The difference remained
114 significant for the proportion of cancer procedures that were performed (33% vs 10%
115 $p=0.002$). Effective operations for functional pathology surgeries were significantly
116 decreased in 2020 (23% vs 65% $p=0.0006$). Emergency operations accounted for a higher
117 proportion of procedures in 2020 (44% vs 25% in 2019, $p=0.04$), but were significantly less
118 common overall in 2020 (27 procedures in 2020 vs 59 in 2019). As shown in Figure 1, the
119 proportions of type of surgery reversed between 2020 and 2019. Fifteen cancer procedures
120 were postponed during the 2020 lockdown, with a median delay of 11 weeks (range: 4-15
121 weeks). These included six cases of endometrial cancer, 5 cases of ovarian cancer and 4
122 cases of breast cancer that were treated by hormonal therapy or chemotherapy. Four
123 conization procedures were postponed during the 2020 lockdown, with a median delay of
124 5.5 weeks for surgery (range 2-9 weeks). Histological analysis was consistent with
125 colposcopy biopsies (cervical intraepithelial neoplasia (CIN) grade 3).

126

127 As shown in Figure 2 and Table 3, after classifying surgeries according to SGO guidelines [5],
128 none of the immediate emergency procedures ($n=18$) and 94% of procedures in the elective
129 group ($n=65/69$) were postponed. A total of 80% of patients in the non-emergency group
130 ($n=29/36$) and 38% of patients in the semi-urgent group ($n=20/52$) had their procedures
131 delayed.

132

133 The median [1st Quartile-3rd Quartile] delay of surgical care was 12.8 weeks [range: 10.4-
134 17.1 weeks] for patients in the elective group, 9.7 weeks [range: 7.71-14 weeks] for patients
135 in the non-urgent group, and 6.7 weeks [range: 5.4-10 weeks] for patients in the semi-urgent
136 group (Figure 3). However, 30 patients (26%) were not included in this analysis, because
137 their procedure had not yet occurred by the end of data collection. Three were lost to
138 follow-up and their surgical indications included hysteroscopies initially planned for
139 synechia, metrorrhagia and infertility. One patient had a procedure performed in another
140 center for a functional pathology. Two patients cancelled their operations for a malignant
141 tumor of the breast and an endometrial cancer grade 1a, because of fear of COVID-19
142 contamination in hospital and did not reschedule surgery, despite explanations of the
143 necessity for the procedures. Two patients did not have procedures due to pregnancy. Five
144 patients with Benjamin Syndrome were rescheduled for hysterectomy in early 2021. The rest
145 of the patients were in the elective group (with surgical indications including myomectomy,
146 prolapse, endometriosis, polyps or synechia).

147
148 There was a potential “loss of chance” in 10 patients among those who had postponed
149 surgeries (n=10/114, 8.7%). For these patients, the median delay was 11 weeks (range: 2 –
150 26 weeks). One patient with a 6-weeks delayed procedure had a difference between the
151 expected (benign ovarian cyst) and effective histology (clear cell ovarian cancer IIIB FIGO
152 stage) with a post-operative pulmonary embolism. One had an endometrial cancer
153 (endometrioid adenocarcinoma, 1A FIGO stage) instead of expected endometrial atypia with
154 a delay of 5 weeks; this patient had post-operative complications including active
155 hemorrhage which required embolization, transfusion and post-operative resuscitation and
156 pelvic abscess with radiologic drainage. One patient needed an axillary lymph node

157 dissection and tumorectomy for T2N2M0 invasive ductal carcinoma that was initially
158 expected to be a papillary carcinoma T2N1M0 following an 11-weeks delayed procedure. Six
159 patients consulted in the emergency room for endometriosis or myomas: 5 for pelvic pain,
160 among them one required the introduction of morphine and one a hospitalization; one had
161 adverse effects of GnRH analogs introduced to delay surgery for endometriosis. One patient
162 had an increase in size of an ovarian Cyst (from 9 to 17 cm) (benign fibro thecoma)
163 responsible for higher complexity of surgery (mini-laparotomy) following a delay of 12.4
164 weeks. One patient underwent an emergency hysteroscopy for hemostasis in the context of
165 hemorrhagic bleeding 3 weeks after the initial date of planned surgery (endometrectomy for
166 endometrial hypertrophy).

167

168 DISCUSSION

169 We observed a 65% drop of surgical activity primarily among procedures for functional
170 pathologies. Our prioritization policy was good for the emergency group (none of surgeries
171 were unduly postponed) and elective group (which were primarily postponed). The delay of
172 surgery was, however, longer than recommended for semi-urgent group [5]. We identified
173 10 patients (8.7%) with a potential “loss of chance”, all in the semi-urgent group with a
174 median delay of 11 weeks (range: 2 – 26 weeks).

175 The COVID-19 pandemic had a significant impact on the types of procedures and scheduling
176 intervals in the Hospital Foch gynecologic surgery department. Globally, there was a 65%
177 drop of surgical activity, primarily among procedures for functional pathologies. These data
178 agree with other published French data: Pinar et al showed a 55% reduction in overall
179 urologic activity in 8 departments in Paris between 2019 and 2020, with a decrease in
180 oncological activity and emergencies of 31% and 44% respectively which translates in more

181 than 1,033 hours of surgical intervention that needed to be rescheduled at the end of the
182 lockdown period [6].

183 Analysis revealed a significant decrease in the proportion of functional surgeries and an
184 increase rate of emergency and cancer surgeries, as expected. But the absolute number of
185 planned surgeries and emergency procedures also decreased. Lack of data about patients
186 who did not consult physicians during this period may have led to underestimate the impact
187 of the COVID-19 [7, 8]. There was an increase of planned surgeries for cancer during this
188 period at Foch Hospital, which could be due to the fact that patients had fewer consultations
189 for cancer during the lockdown but we cannot eliminate the possibility of transfers of
190 patients from one center to another. A multicenter French survey showed that 50% of 12
191 centers increased their activity concerning breast cancer surgery in the first lockdown but
192 reduced the duration of hospitalization [9]. In a survey involving 16 European countries,
193 gynecological cancer patients expressed significant anxiety about progression of their
194 disease due to modifications of care related to the COVID-19 pandemic and wished to
195 pursue their treatment as planned despite the associated risks[10]. Nevertheless, two cancer
196 patients in our department decided to cancel their surgeries because of fear of COVID-19
197 contamination in the hospital. This situation had a dramatic impact on their prognosis. A
198 total of 57% of our patients with cancer could maintain their surgery date without delay, a
199 rate that is similar to that reported by others [11]. Hormonal therapy for breast and
200 endometrial cancers and neoadjuvant chemotherapy for ovarian cancer were started in the
201 setting of procedural delay [5, 12]. Currently available evidence is limited by small sample
202 size, and the full impact of this pandemic on gynecologic cancer is yet to be determined [13].

203 It is feasible there could be a secondary mortality and morbidity peak due to missed or
204 delayed procedures[14].

205

206 The CNGOF has provided recommendations based on data from three lockdown phases
207 during the COVID-19 pandemic ranging from Phase 1 where only immediate emergency
208 surgeries could be performed to Phase 3, where all surgeries could restart [3]. A
209 classification for prioritizing patients in four groups was also set up by the Society of
210 Gynecologic Oncology [5]. We used this system to evaluate the delays in surgeries by
211 priority. Our prioritization was good for the emergency group (none of surgeries were
212 unduly postponed) and elective group (which were primarily postponed). Approximately
213 30% of the postponed procedures had not been performed at the end of the data collection,
214 which could artificially improve the median delay described particularly for the elective
215 group and underestimate “loss of chance” for these patients as definitive information
216 provided during surgery was not available. The delay of surgery was, however, longer than
217 recommended for semi-urgent group.

218

219 Collateral damage of COVID-19 may have negatively impacted patients with other diseases
220 [15]. For example, the COVID-19 outbreak impacted stroke care significantly, including
221 prehospital and in-hospital care, resulting in a significant drop in admissions, thrombolysis,
222 and thrombectomy [16]. Additionally, there was an increase in mortality for patients with
223 chronic cardiovascular diseases included in a waiting list due to cancellation of invasive
224 elective procedures [17]. The early stages of the COVID-19 pandemic have focused on
225 containing SARS-CoV-2 infection and identifying treatment strategies. While controlling this
226 communicable disease is of utmost importance, the long-term effect on individuals with
227 non-communicable diseases is also significant. We evaluated the potential negative impact
228 of postponed surgeries due to COVID-19 among Hospital Foch gynecologic patients using a

229 composite criterium, identifying 10 patients (8.7%) with increased risk. The patients all had
230 indications considered semi-urgent, but the median interval to surgery was 11 weeks, which
231 is much longer than recommended [5]. Three cases of cancers were initially underestimated
232 (ovarian, endometrial and breast cancer). For the ovarian cancer, it was certainly due to a
233 poor analysis of the imaging. Atypia are the site of real endometrial tumors in about 30% of
234 cases, which could explain the misdiagnosis of the endometrial cancer [18]. Furthermore,
235 axillary lymph node dissection in breast cancer is debatable for 2 sentinel lymph nodes
236 containing metastases [19]. Even if it was not measurable, the delayed time to surgery for
237 these three patients who had cancer severity underestimated may have translated to a
238 negative impact on their long-term prognosis and increased medical risk. These cases show
239 the pitfalls of preoperative triage in crisis period. It is our opinion that immediate post-
240 operative complications were not related to surgical delays in these cases. For the other
241 cases, morbidity was increased and involved pain, bleeding, poor tolerance of medications,
242 or increase in surgical complexity. It seems likely this represents a small proportion of the
243 collateral impacts of COVID-19 outbreak on our patients, since there was an unknown
244 population of patients who didn't consult hospital physicians due to fear of infection. A
245 recent study of 181 pelvic gynecological cancers showed a direct detrimental impact of the
246 COVID-19 pandemic for 39 patients, representing 22% of the patients [20].

247 As for other medical specialties, a lack of medical care was observed in gynecology during
248 the first Lockdown due to COVID-19 pandemic. Delay of surgery gynecologic pathologies led
249 to collateral damages including potential "loss of chance" for these patients. Interruption in
250 medical care should be avoided as much as possible. Urgent and semi-urgent surgeries
251 shouldn't be rescheduled. Teleconsultation should be widespread during a pandemic in
252 order to maintain a minimal follow-up.

253 A major weakness of our study is that we used the classification according SGO in four
254 urgency categories, which deals mainly with oncologic surgeries. Non oncologic indications
255 were lacking, , so we added some benign diseases in a personal manner. In addition we lack
256 data about how many patients avoided consultations. Another limitation is that it was a
257 single-center study carried out in one gynecology and obstetrics department in the Parisian
258 area. The study had a low statistical power, and had no control group to assess “loss of
259 chance”. We used a composite criterion to increase statistical power and provide a glimpse
260 into real-world clinical data. However, interpretation of the results was challenging because
261 events of different severity were grouped together. This study had few exclusion criteria, but
262 so in view of the above arguments, our study had a poor external validity . To date, there
263 have been few studies highlighting the potential “loss of chance” for postponed medical care
264 due to COVID-9. To our knowledge, this is the first study to evaluate year-over-year changes
265 in amounts, types, and scheduling of gynecologic surgeries across all categories.

266

267 Conclusion

268

269 The COVID-19 pandemic was the cause of a significant decrease (65%) of activity in our
270 surgical department during the first French lockdown. It was difficult to reschedule
271 procedures, which resulted in an increased delay in semi-urgent operations beyond the
272 interval recommended by guidelines. We observed a potential “loss of chance” for almost
273 9% of postponed surgeries. This collateral damage of COVID 19 pandemic was probably
274 underestimated, as only 50% of surgery were initially planned in comparison with the same
275 period in 2019. It is important to continue to treat pathologies requiring urgent or semi-
276 urgent surgery during pandemics so as not to increase the collateral damage.

277 **Declaration of Competing Interest**

278 The authors declare that they have no known competing financial interests or personal
279 relationships that could have appeared to influence the work reported in this paper.

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282

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369 Figures legends

370 Figure 1. Pie chart. Proportions of surgery between 2020 and 2019 (March- 14-May 11).

371 Figure 2: Delayed number of patients according to SGO emergency categories [5]

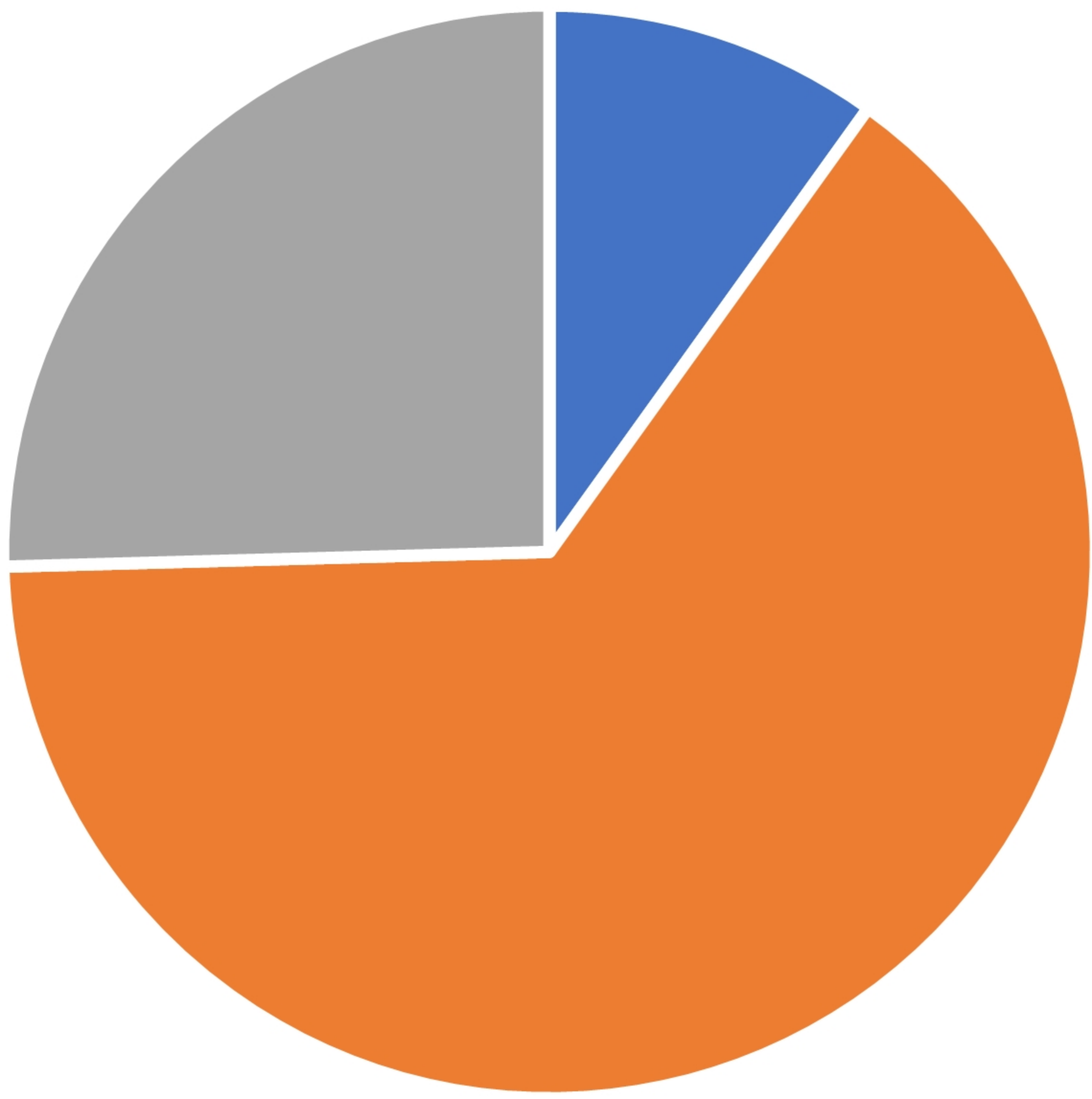
372 Figure 3: Median Delay of surgical care according to emergency categories [5]

373 *Box plot with median 1st Quartile-3rd Quartile; w : weeks*

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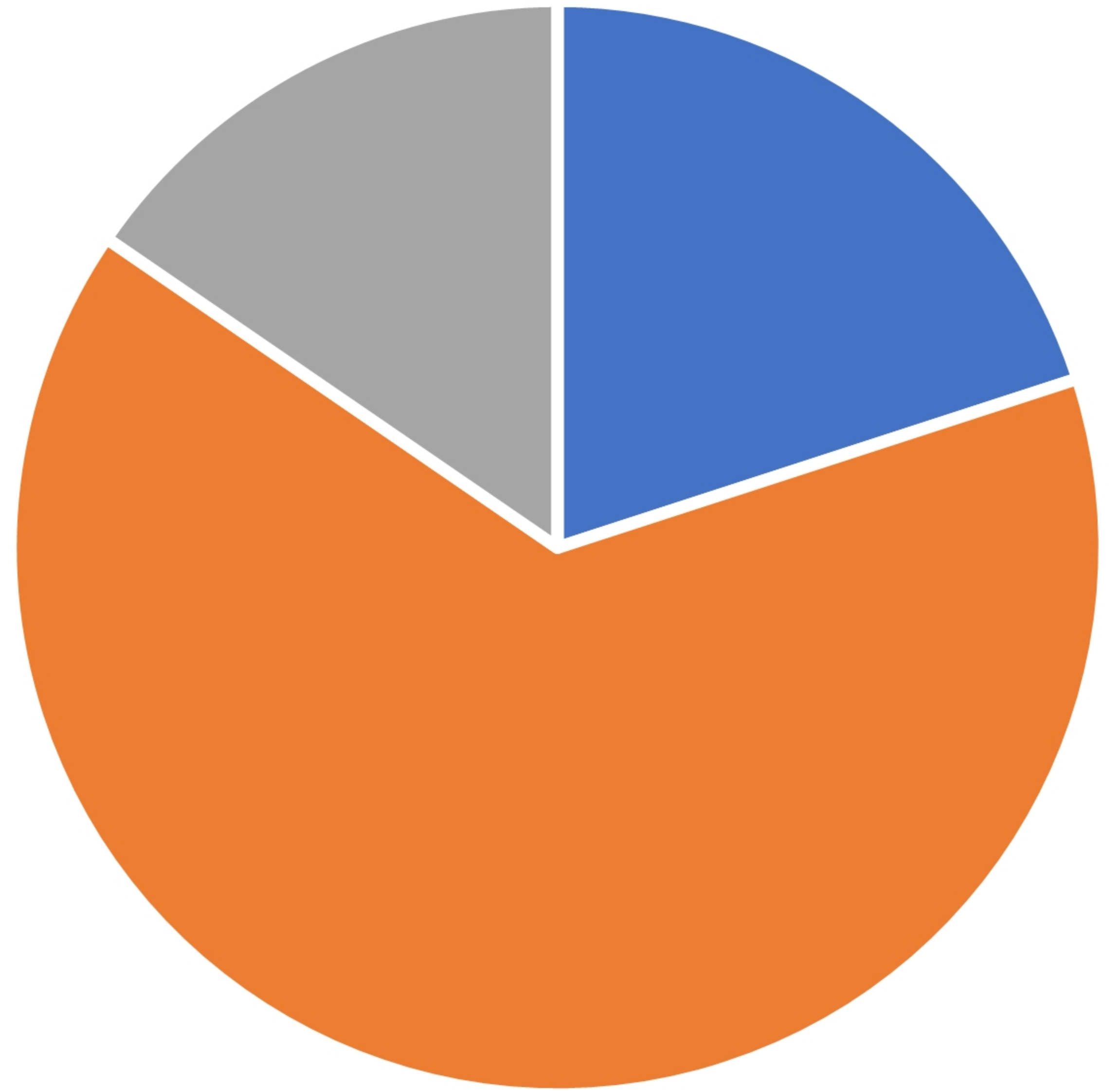
375

Surgery in 2019



■ cancer ■ functional
■ emergency

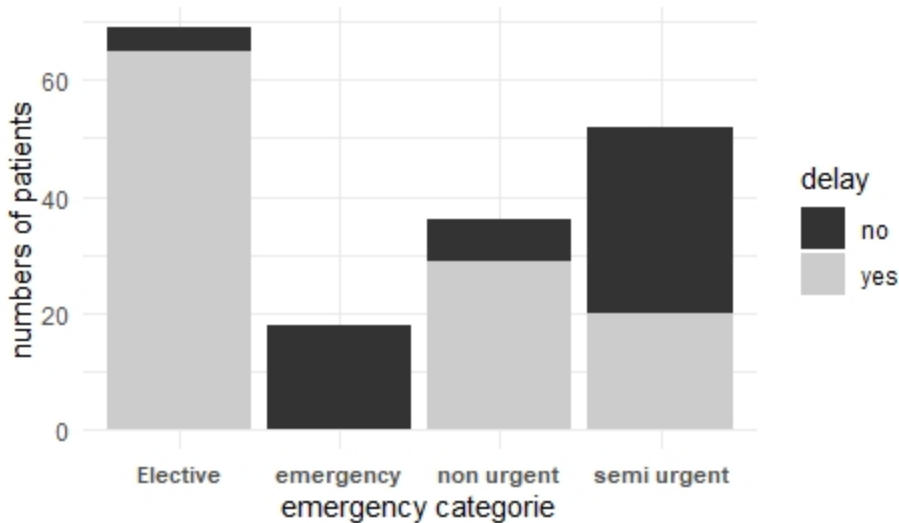
Surgery planned in 2020



Surgery performed in 2020



Delayed numbers of patients according to emergency categories



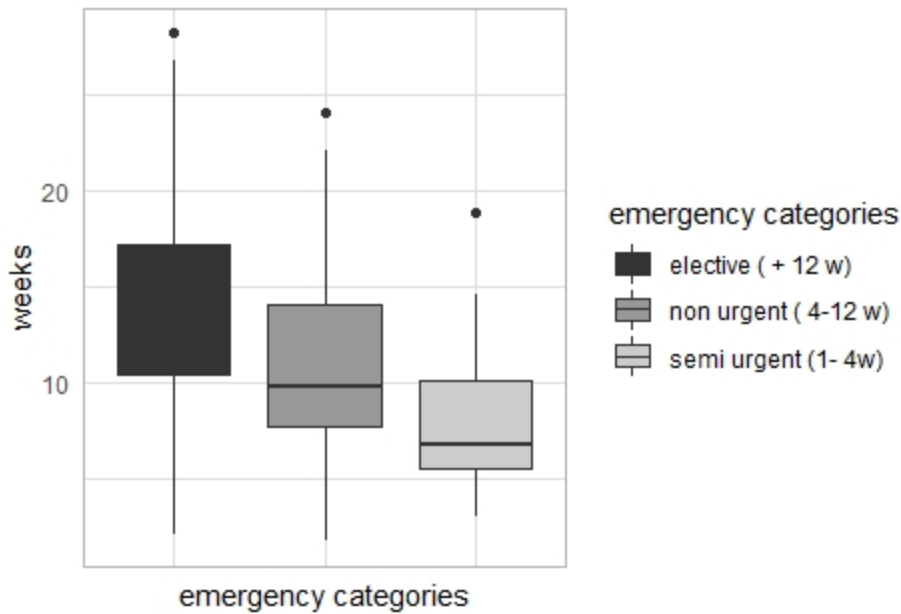


Table 1: Planned and actual surgeries during French first lockdown in comparison with 2019 same period

Surgery n(%)	2019	2020 Planned	P	2020 Actual	P
Cancer	23(10)	35 (20)	0.01	20(33)	0.0002
Endometrial cancer	1(0.4)	13(7.4)	0.0002	7(11.5)	0.000008
Ovarian cancer	11 (4.7)	13(7.4)	0.3	8(13.1)	0.03
Breast cancer	11(4.7)	9(5.1)	0.8	5(8.2)	0.3
Functional	150(65)	113(65)	0.99	14(23)	0.0006
Cervical cerclage	4(1.7)	2(1.1)	0.6	2(3.2)	0.4
Others laparoscopy	22(9.5)	7(4)	0.04	1(1.6)	0.05
Conization	4(1.7)	7(4)	0.1	3(4.9)	0.1
Prolapse repair	0	3(1.7)	NA	0	NA
Hysteroscopy	71(30.6)	48(27.4)	0.6	5(8.2)	0.003
Cystectomy	5(2.1)	6(3.4)	0.44	2(3.2)	0.6
Laparotomy myomectomy	7(0.8)	12(6.8)	0.08	1(1.6)	0.5
Mastectomy for Benjamin Syndrome	2(0.9)	4(2.3)	0.24	0	NA
Hysterectomy for benign diseases	30 (13)	21(12)	0.8	0	NA
Other surgery	5(2.1)	3(1.7)	0.75	0	NA
Emergency	59(25.4)	27(15.4)	0.04	27(44)	0.04
Breast abscess	6(2.5)	2(1.1)	0.3	2(3.2)	0.7
Bartholinitis	11(4.7)	1(5.7)	0.01	1(1.6)	0.2
Other laparoscopy	0	2(1.1)	NA	2(3.2)	NA
Curettage	26(11.2)	9(5.1)	0.04	9(14.7)	0.5
Ectopic pregnancy	13(5.6)	5(2.9)	0.2	5(8.1)	0.48
Vulvar hematoma	0	1(5.7)	NA	1(1.6)	NA
Hysteroscopy	0	2(1.1)	NA	2(3.2)	NA
Ovarian torsion	3(1.3)	5(2.9)	0.2	5(8.2)	0.004
TOTAL	232(100)	175(100)		61(100)	

NA: non applicable; n : number of patients

Table 2. SGO Guidelines for classification of urgency in gynecologic surgery [5]

Emergent/Urgent immediate	Semi urgent 1-4 weeks	Non urgent >4-12 weeks	Elective >3 months
Emergent: procedure performed without delay to preserve life or limb.	Procedure performed to preserve the patient's life or prevent expected progression of disease/morbidity.	Progression of disease or symptoms, or readmission within 3 months is unlikely or nonsurgical treatments available	Procedure that does not involve a medical emergency. The procedure can be delayed without meaningful disease progression or morbidity.
Urgent: Procedure performed when the patient is medically stable	Designation determined by specialty		
-Viscus perforation	-Establishment of cancer diagnosis when high suspicion exists (i.e. laparoscopy, hysteroscopy)	-Benign-appearing ovarian cysts/masses	-Risk reducing surgery for genetic predisposition to gynecologic cancer
-Closed-loop bowel or colonic obstruction		-VAIN/VIN2-3	-Hysterectomy for benign disease in absence of anemia
-Incarcerated hernia with gynecologic tumor	-Grade 1 endometrial cancer when hormonal therapy is contra- indicated or not possible	-CIN 2-3	-Uncomplicated endometriosis
-Vaginal, uterine or pelvic hemorrhage	-High grade uterine cancers, all stage	-CAH/EIN; grade 1 endometrial cancer when hormonal therapy is not contraindicated	-Pelvic organ prolapse
-Molar pregnancy	-Cervical and vulvar cancer-surgery, with curative intent	-Completion surgery for early-stage ovarian cancer	-Urinary incontinence
-Pelvic mass with torsion or with urinary or intestinal obstruction	-Advanced ovarian cancer	-Recurrent cancer requiring palliative resection	
	-Abdominopelvic masses concerning for malignancy		
	-Symptomatic gynecologic cancer in pregnancy requiring surgery		
	-Symptomatic patients with inoperable primary or recurrent cancer requiring palliative cancer procedures		
	-Moderate-severe anemia requiring repeated transfusion		

VAIN: Vaginal intra epithelial neoplasia; VIN: Vulvar intraepithelial neoplasia; CIN: Cervical intra epithelial neoplasia; CAH/EIN: Complex atypical hyperplasia/Endometrial intraepithelial neoplasia

Table 3: classification of planned and actual surgeries according to SGO

classification [5]

Surgery n(%)	2019	2020 Planned	P	2020 Actual	P
Urgent	59(25%)	NA	NA	18 (29%)	0,6
Semi-urgent	23(10%)	52 (30%)	0,000002	32 (52%)	0,000000009
Non urgent	8(4%)	36 (20%)	0,0000009	7 (12%)	0,01
Elective	142(61%)	69 (40%)	0,01	4 (7%)	0,0000005
TOTAL	232 (100%)	175 (100%)		61 (100%)	

NA: non applicable; n : number of patients