Consenting surgical patients for the risk of contracting COVID-19 during the hospital stay

Abstract

Background/aims Postoperative pulmonary complications occur in half of patients with perioperative COVID-19 and are associated with high mortality. The Royal College of Surgeons of England published guidance on recovery of surgical services during and after the COVID-19 pandemic. One part of this toolkit looked at unique considerations during the COVID-19 pandemic, in particular the risk of contracting COVID-19 while in the hospital. This quality improvement project sought to assess consent forms from the authors' surgical department to see if patients were being consented for the risks associated with COVID-19 during their stay in the hospital.

Methods Over an 8-week period in October and November 2020, consent forms for patients under the general surgery department were audited four times against the Royal College of Surgeons of England's standards. Patients were included in the study if they were deemed to have capacity to consent to a procedure. Posters in the hospital, generic emails and teaching sessions were used as the interventions after each cycle of the audit.

Results Baseline measurement showed that fewer than 37% of patients were consented for the risk of contracting COVID-19; this rose to almost 61%, 71% and 85% in the second, third and fourth parts of the project respectively. Year 1 and 2 core surgical trainees and clinical fellows below registrar level showed the greatest improvement, from consenting only 8% of patients up to 100% of patients, while specialty registrars showed improvement in consenting from 52% to 73%. The change was sustained 2 years after the initial interventions, with almost 60% of patients consented for the risk associated with in-hospital COVID-19 infection in March 2023.

Conclusions Errors or omission of important elements in documentation of patient consent can delay operations, expose hospital trusts to medicolegal risk and ultimately may represent a failure to fully respect patient autonomy. This project sought to evaluate consenting practice during the presence of COVID-19 in society. While the teaching session showed some improvement in the consenting for the risk of COVID-19, emails and visual posters increased the consent rates further.

Key words: Consent; COVID; Quality improvement; Surgery

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Introduction

Patients infected with COVID-19 in the perioperative period are at high risk of postoperative pulmonary complications (50%) and increased 30-day mortality (16.2%) (Nepogodiev et al, 2020). Concerns about perioperative complications led to the cancellation of elective surgeries during the initial phase of the COVID-19 pandemic (COVIDSurg Collaborative, 2020). This also caused delays in emergency surgeries and diagnoses of acute surgical illnesses (Reichert et al, 2020). In 2020, it was estimated that more than one in four inpatient cases of COVID-19 were hospital acquired, where the patient either tested positive 8 days after admission or within 4 days of discharge (Discombe, 2020).

In May 2020, the Royal College of Surgeons of England (2020a) published guidance on recovery of surgical services during and after COVID-19, and in June 2020, tool 5 was added to this guidance. This reminded surgeons of the consenting principles set out by the General Medical Council and Royal College of Surgeons of England, emphasising the need to discuss with patients the risk of contracting COVID-19 while they are in hospital (Royal College of Surgeons of England, 2020b). Part 3a of the tool focuses on the risk

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of contracting COVID-19 during the hospital stay and the perioperative risks for patients who have COVID-19 undergoing surgery (Royal College of Surgeons of England, 2020c).

This quality improvement project sought to assess the compliance of members of the general surgical department with part 3a of tool 5 for patients undergoing elective and emergency operations.

Methods

Baseline measurement

Over an 8-week period in October and November 2020, consent forms for patients being treated in the general surgery department, at Queens Hospital in London, were audited four times against the Royal College of Surgeons of England's standards. Forms were included for patients deemed to have capacity to consent for a procedure (assessed by checking patients' notes and analysing consent forms). Therefore, only consent form 1 was included in the study and all other forms, eg those for children, were excluded.

All forms were analysed looking at the type of procedure, age of patient, urgency of the procedure, level of the doctor consenting the patient, and whether the patient was or was not consented for the risk associated with COVID-19 infection.

On the baseline measurement of consent forms (n=38), fewer than 37% of patients were consented for the risk associated with COVID-19 infection.

Design

As a high number of consent forms did not mention the risks associated with COVID-19 infection, and in light of the effects of the infection on patients' health, improvement was necessary. An intervention took place in the form of teaching, e-mails and visual memory aids.

Strategy and improvement cycles

As the pandemic forced changes to practice, it was important to bring attention to the issue of low rates of consent, so a series of interventions was planned to tackle this and the consent forms were re-audited fortnightly.

Improvement cycle 1

A teaching session on the Royal College of Surgeons of England's (2020b) guideline was given to the surgical department, and emails were sent to those who were involved in consenting patients for the risk of COVID-19 infection, reminding them of the importance of mentioning it in the consent form. However, after this intervention, almost 40% of patients were still not being consented for the risk of COVID-19.

Improvement cycle 2

Posters were distributed within the surgical department and posted in the surgical handover room to act as a reminder to clinicians, and another teaching session was held. There was still room for improvement after this intervention, as more than 28% of patients were not being consented for the risk of COVID-19.

Improvement cycle 3

Posters were put up in the surgical wards to remind doctors to consent the patients for the risk of COVID-19. After this, more than 84% of the consent forms included the risk of COVID-19 infection.

Results

Consent forms from 139 patients were reviewed over the four cycles (n=38, 41, 28 and 32). Around 57.5% of patients were males, with an average age of 55.9 years. Overall, 53% of forms were for emergency procedures and 47% were for elective procedures.

As the risks associated with COVID-19 infection had not been mentioned in a high number of consent forms (63%) at baseline, intervention for improvement was deemed

necessary. Following the interventions, the proportion of patients who were consented about the risk of contracting COVID-19 during the perioperative period rose between cycles (37%, 61%, 71% and 85% respectively), and was significantly increased between the first and last cycle ($P<0.01$, two-sided Z-test).

These interventions had benefits for doctors of all grades. The rate of consenting for speciality registrars increased from 52% initially to 73.3% after the last intervention. The highest percentage of attendance at educational sessions was by year 1 and 2 core surgical trainees and clinical fellows below registrar level, and a substantial increase in their consenting practice was seen from 8% initially to 100% after the last intervention.

Sustainability of change

In March 2023, the authors checked for sustainability of change from these interventions, by running another cycle looking at consent forms for patients who had elective or emergency procedures under the general surgery department. Almost 60% of patients were consented for the risk associated with COVID-19 infection. Core surgical trainees and clinical fellows had the highest percentage of consenting at 85.7%, while specialty registrars mentioned the risk of COVID-19 in 47.4% of consent forms.

Discussion

Mortality rates are higher in patients who undergo surgical procedures if they have COVID-19. With its persistent presence in the community and the possibility of new waves, there is a need to accommodate such changes in practice for the foreseeable future. Proper consenting gives patients appropriate knowledge to allow them to weigh the benefit and risks of a certain procedure to help them make a more informed decision on whether to have a procedure at a specific time. It also protects doctors and organisations from legal liabilities that can arise if a patient develops one of the consequences of undergoing an operation.

This quality improvement project showed great improvement in compliance with the Royal College of Surgeons of England (2020b) guidelines with the overall rates of consent rising from 37% to 84%. However, more work needs to be done to achieve similar rates in different grades of doctors. This project showed sustainable change over more than 2 years with an increase of consenting to almost 60% compared to only 37% at the first audit cycle.

Limitations

The main limitation was that this study only included consent form 1. In future improvement cycles, other types of consent forms should be reviewed to ensure compliance in all clinical settings, and including children and those who do not have the capacity to consent for themselves.

Conclusions

Patients who contract COVID-19 perioperatively have poorer outcomes and should be consented for the risk of acquiring the disease while in hospital. This article demonstrates the effectiveness of a simple educational intervention combined with serial auditing to disseminate this message. Errors or omission of important elements in documentation of patient consent can delay operations, expose hospital trusts to medicolegal risk and may represent a failure to fully respect patient autonomy. This project evaluated consenting practice. While the teaching session showed some improvement in consenting for the risk of COVID-19, emails and posters increased the consent rates further. This practice may help initiate sustainable improvement in consenting practice at other centres.

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Key points

- Patients who contract COVID-19 in the perioperative period are at high risk of postoperative pulmonary complications (50%) and increased 30-day mortality (16.2%).
- This quality improvement project demonstrated the effectiveness of simple educational interventions to improve the quality of consenting procedure.
- The same interventions may help improve consenting practice.
- Following up the change to ensure sustainability is essential to show the effectiveness of the tools used for quality improvement.

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Conflicts of interest

The authors declare that there are no conflicts of interest.

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