Cancelling on the Day of Surgery in an Ambulatory Setting Due to Patient Factors: A Preliminary Study

Cancelamento no Próprio Dia em Cirurgia de Ambulatório Devido a Fatores Relacionados com o Doente: Um Estudo Preliminar

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Cancellations on the day of surgery cause a heavy burden for patients and pose a significant setback to healthcare systems.\(^1,2\) Just like for inpatient care, the cancellations in ambulatory surgery also contribute negatively for patients and healthcare systems. The literature is, however, quite scarce concerning the parameters that are associated with missing a surgery in the ambulatory setting.\(^1,2\) Some of these cancellations are due to patient factors and frequently limit the enrollment of a new patient due to logistic and clinical constraints. Available surgical periods are thus lost.\(^1,2\)

We carried out a preliminary study at our hospital. We analysed a total of 19781 patients enrolled for elective day-case surgery in 2018, from which 1253 (6.33%) made a cancellation on their intended day of surgery (due to patient factors, the most prevalent being ‘change in patient status’ (33.04%; \(n = 414\)), ‘missing surgery with a plausible reason’ (28.01%; \(n = 351\)) and ‘missing surgery without a plausible reason’ (20.67%; \(n = 259\)). These numbers are in agreement with data from the literature.\(^3\)

Patients residing closer to the hospital (under 10 km) were more likely to have cancellations than those residing more than 10 km away (36.7% vs 3.7% \(X^2\), \(p < 0.05\)). This could be because patients residing closer to the hospital have easier access to the hospital and may therefore be less reluctant in cancelling/postponing a surgical procedure.

Moreover, patients aged 65 years old and over had a higher cancellation rate (7.5% vs 5.3% \(X^2\), \(p < 0.05\)). Patients of older age groups commonly have more comorbidities, increased limitations, and constraints in individual mobility. These factors may hinder the adequate completion of the process towards surgical treatment.

Finally, patients without a prior pre-operative medical appointment might have a higher likelihood of same day cancellation (those who cancelled were less likely to have had a pre-operative medical appointment (5.8% vs 14.01% \(X^2\), \(p < 0.05\)). This suggests that, apart from what we already know, namely that attending the preoperative medical appointment is associated with a reduced likelihood of cancellation, patients without a prior pre-operative medical appointment regardless of the reason, might have a higher likelihood of same day cancellation in ambulatory surgery.\(^4,5\)

These initial results of our study are valuable as a preliminary assessment that could lead to the possible development of algorithms aimed at anticipating the cancellation of a given patient. A risk prediction tool aimed at identifying with a high degree of accuracy those with a higher likelihood of cancellation on the same day could be developed, which would enable the enrolment of a replacement in case of effective cancellation. Such an approach could allow faster treatment for patients while also optimizing healthcare resources.

AUTHORS CONTRIBUTION
ECA: Draft of the paper.
JTO; MG; CF, AP: Critical review and approval of the final version.

PROTECTION OF HUMANS AND ANIMALS
The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

DATA CONFIDENTIALITY
The authors declare having followed the protocols in use at their working center regarding patients’ data publication.

COMPETING INTERESTS
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REFERENCES


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