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Emotional status and fear in patients scheduled for elective surgery during COVID-19 pandemic: a nationwide cross-sectional survey (COVID-SURGERY)

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Abstract

The aim of this multicentre nationwide prospective cross-sectional survey was to evaluate the impact of pandemic on emotional status and fear of SARS-CoV-2 contagion in a cohort of elective surgical patients in Italy, scheduled for surgery during the COVID-19 pandemic.

Background: Fragmented data exist on the emotional and psychological distress generated by hospital admission during the pandemic in specific populations of patients, and no data exists on patients scheduled for surgery. The aim of this multicentre nationwide prospective cross-sectional survey was to evaluate the impact of pandemic on emotional status and fear of SARS-CoV-2 contagion in a cohort of elective surgical patients in Italy, scheduled for surgery during the COVID-19 pandemic.

Methods: Anaesthesiologists registered to SIAARTI were invited to participate to the study via emails and using the official newsletter and social media of the Society. Each participating centre could collect up to a maximum of 100 patients in a 30-day period between the 12th of January 2021 and the 30th of June 2021. All the adult patients scheduled to receive an elective surgical procedure in an operating room, under general or locoregional anaesthesia or sedation, were eligible. Exclusion criteria were age inferior to 18 years old, urgent/emergency surgical procedures and being not mentally competent or already affected by a psychiatric disease with active symptoms. The survey consisted of 28 total closed questions, including four study outcome questions. Questions related to the emotional status and fear were drafted with the aid of a psychologist, to improve content validity. The questionnaire was administered either in a paper form or through a verbal interview in person, according to the patients' preference during the anaesthesiologic pre-operative visit. The data were analysed with descriptive statistics. Ordinal logistic regression models were applied to evaluate variables independently associated with worse patients' responses to the four study outcome questions.

Results: With the collaboration of the SIAARTI study group, 29 Italian centres were involved in the study, for a total of 2376 patients surveyed (mean age of 58 years \pm 16.61; 49.6% males). More than half of patients had at least one chronic disease (54%), among which cardiovascular diseases were the

commonest (58%). The most frequent type of surgery was abdominal (20%), under general anaesthesia (64%). Almost half of the patients (46%) declared to be frightened of going to the hospital for routine checkups; 55% to be afraid of getting SARS-CoV-2 infection during hospitalization and 62% feared being hospitalised without seeing family members. Having an oncological disease and other patient-related, centre-related or perioperative factors were independently associated with an increased risk of fear of SARS-CoV-2 infection during hospitalization and of being hospitalised without seeing family members. A previous infection due to SARS-COV-2 was associated with a reduced risk of worse emotional outcomes and fear of SARS-CoV-2 infection during hospitalization. Patients who showed the most emotionally vulnerable profile (e.g. use of sleep-inducing drugs, higher fear of surgery or anaesthesia) were at higher risk of worse emotional status towards the hospitalization during COVID-19 pandemic. Being operated in hospitals with lower surgical volume and with COVID-19 wards was associated with worse emotional status and fear of contagion.

Conclusions: According to our results additional fear and worse emotional status may be frequent in patients scheduled for elective surgery during COVID-19 pandemic. Psychological support may be considered to help patients scheduled for surgery to overcome this worse emotional status and to improve perioperative wellbeing during the pandemic.