

## A multifaceted virus. Non-reducible and strangulated effects of COVID-19

### To the Editor:

We have read with great interest the article, published by Rausei et al.,<sup>1</sup> titled “Dramatic decrease of surgical emergencies during COVID-19 outbreak.” The main finding of the study was that emergency surgical admissions and surgical operations significantly decreased during the pandemic, while the authors tried to elucidate the possible explanations behind this situation. Our experience comes from a tertiary university hospital in Greece, which covers a population of 1.5 million.

In agreement with previous reported studies, we have seriously noticed a significant reduction of elective surgical cases during the pandemic, as far as benign and malignant surgical pathologies are concerned.<sup>2,3</sup> However, our collected data about emergency surgical cases are different, when compared with the lowering in numbers, which is reported in the aforementioned article. Are we seeing fewer or even the same number of patients, although sicker ones? Is there a major change in clinical practice during this era that needs to be highlighted?

Interestingly enough, in contrast with the findings reported by Rausei et al.,<sup>1</sup> we have observed that our number of emergency operations performed has been unaffected by COVID-19 era (494 vs 471),

when compared between same periods before and after the outbreak of coronavirus. Nevertheless, a result that needs to be highlighted is that patients with benign entities, like hernias of any type, present to the hospital with delayed onset of symptoms, when compared with those admitted before the pandemic, probably because of their fear of getting infected with the novel coronavirus.

Herein, we report our numbers for nonreducible and strangulated hernias (inguinal, epigastric, and incisional), highlighting the statistically significant difference in numbers between patients presented with non-reducible and strangulated inguinal and incisional hernias, before and after COVID (Table 1). In agreement with this, our data show that not only hospital stay but also operation duration has increased, a fact that reflects the severity of the clinical presentation of patients in the COVID era.

Undoubtedly, there is an impeding danger for benign pathologies, such as hernias, which must be addressed and seriously considered during this outbreak. Our findings should be the initiative for discussions between health care providers as to degree of excess morbidity and mortality suffered by general surgical patients with such benign pathologies in the COVID era. Moreover, the delayed presentation of patients with benign entities poses a major ethical dilemma nowadays that must be faced with caution by physicians and surgeons worldwide.

Robust conclusions about collateral damage of the virus in health status of general population might only be appreciated

by future studies. In summary, our results must be interpreted by health administrators, which should offer solutions to improve health care access while simultaneously maintaining the integrity of the COVID-19 control management measures.

### DISCLOSURE

The authors declare no conflicts of interest.

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## Reply to: “A multifaceted virus. Nonreducible and strangulated effects of COVID-19”

### To the Editor:

On behalf of all coauthors and collected data contributors, we would like to thank Drs Mulita, Sotiropoulou, and Vailas from Greece for their comments on our recent publication entitled

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**TABLE 1.** Nonreducible and Strangulated Hernia Cases Before and After COVID Outbreak

Types of Hernias	Pre-COVID-19, February 26, 2019 to December 26, 2019	COVID-era, February 26, 2020 to December 26, 2020	Statistical significance, $p < 0.05$
Nonreducible inguinal hernias	41	62	$p < 0.05$
Strangulated inguinal hernias	10	31	$p < 0.05$
Non-reducible incisional hernias	18	30	$p < 0.05$
Strangulated incisional hernias	7	15	$p < 0.05$
Nonreducible epigastric hernias	8	9	NS
Strangulated epigastric hernias	6	7	NS

NS, not significant.