

Dear Sir,

We fear the limitations of a recent article risk compromising patient care.(Nepogodiev et al., 2020)

Comparisons were made between 1128 covid-positive patients' outcomes and pre-pandemic data. This is illogical, as wholesale changes meant that only extremely urgent surgery was likely undertaken during the period. Furthermore, presentation for treatment was likely delayed and hence the clinical state more severe than in pre-pandemic times. It is plausible that positive covid status may be a confounder for a relationship between poor operative outcome and suboptimal healthcare provision due to service strain during pandemic peaks. Thus, worse outcomes are expected irrespective of covid status, and this is unaddressed. The 1209 authors could have easily captured "non-covid" patient outcomes too, which would have provided meaningful context.

The inclusion criteria comprised preoperatively covid-positive patients who proceeded with surgery presumably due to strong clinical need, and those who clinically deteriorated post-operatively and were consequently tested. Asymptomatic positives (estimated 50% cases) would not necessarily be tested. Hence, there is a high risk of bias towards worse outcome.

There is significant heterogeneity in pathology and outcomes (0% versus 42.9% mortality for ophthalmology versus thoracic surgery), making the overarching headline of 23.8% mortality misleading.

Suggesting that surgery be postponed for those purportedly high-risk is not justified and may lead to care being denied inappropriately. Furthermore, this proposal is not generalisable to the resumption of elective surgery under different circumstances, with pre-operative testing, isolation and covid-free environments.

More appropriate discussion of the limited applicability of these data is warranted.

Jeremy Rodrigues¹, James K-K Chan^{1,2}, Fadi Issa^{1,3}

¹Department of Plastic Surgery, Buckinghamshire Healthcare NHS Trust

²Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford

³Nuffield Department of Surgical Sciences, University of Oxford

References

Nepogodiev D, Glasbey JC, Li E et al. Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection: an international cohort study. *The Lancet*. 2020.