

## CORRESPONDENCE



# Where did all the retinal detachments go? Gathering insights into who did not attend during the first peak of COVID-19

© The Author(s), under exclusive licence to The Royal College of Ophthalmologists 2021

Eye (2022) 36:1510–1511; <https://doi.org/10.1038/s41433-021-01695-8>

## TO THE EDITOR

We read with interest your letter [1] regarding the delayed presentation of retinal detachments and increased rates of proliferative vitreoretinopathy (PVR) during the first peak of the COVID-19 pandemic. Following the presentation of your data, we too have examined the cohort of patients that presented at the time of the first peak of COVID-19 (March and April 2020) and compared them with those presenting in the same 2-month period, 12 months prior at Moorfields Eye Hospital in London.

Similar to findings elsewhere in the United Kingdom [2, 3] and worldwide [4], the number of presenting patients who required retinal detachment surgery during the first peak of COVID-19 reduced from 281 in 2019 to 199 in 2020, suggesting that 41.20% of retinal detachments did not present in the 2020 cohort (Fig. 1). The proportion of macula off retinal detachments, suggesting a delay in presentation, was significantly higher compared to 2019 (54.27% in 2020, 42.35% in 2019,  $p = 0.005$  by  $\chi^2$  test—an increase of 21.97%). We too noted a trend towards increased prevalence of PVR, a marker of chronicity in retinal detachment (14.57% in 2020, 9.96% in 2019,  $p = 0.06$  by  $\chi^2$  test—an increase of 31.62%). Together, the data suggest that not only were there less patients with retinal detachment that presented for surgery, but that those that did present were more likely to have chronic changes such as PVR.

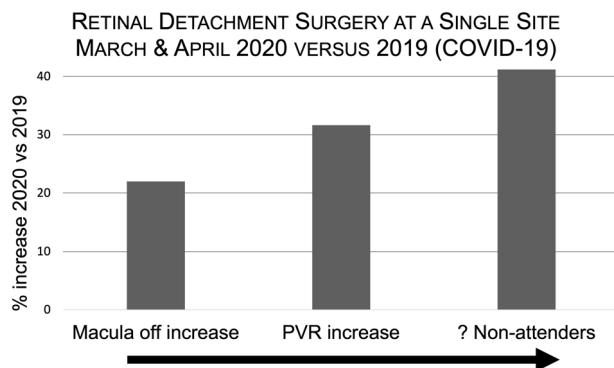
The question was asked by Awad et al., whether some of this reduction in the presentation was due to patients seeking care more locally in the face of the risk of COVID-19, as well as travel

restrictions. In response to this question, we reviewed how far the 480 patients travelled from their home address to Moorfields at City Road, EC1V 2PD (where all of the operations were performed) on Google maps. We noted that there was no statistically significant difference between distance travelled during the two periods (27.1 miles in 2020, 29.6 miles in 2019,  $p = 0.43$  by  $t$  test). This suggests that patients continued to travel to a tertiary centre despite the pandemic. This finding begs the question “What happened to the missing retinal detachments?”

We also collected data on the ethnicity of patients who required retinal detachment surgery during the two time periods. We note that in 2020 15.58% of patients requiring retinal detachment surgery were of Black, Asian or Minority Ethnicity (BAME) versus 21.71% in 2019 ( $p = 0.046$  by  $\chi^2$ ). This suggests that a lower proportion of BAME patients attended for retinal detachment surgery during the COVID-19 study period.

While we accept that there may have been less trauma-related retinal detachments as travel, work, and sport were reduced during this period, it is unlikely that would account for a 41.20% reduction in presentation. It follows that a significant proportion of retinal detachments just never presented, likely due to fear of COVID-19. In addition, during the first peak there was ever-growing data and public discussion of the devastating effect of COVID-19 in the BAME community and this may account for our observation of less BAME patients presenting for retinal detachment surgery during this period.

It will be difficult to count the number of missed retinal detachments as they trickle into eye departments over the country and around the world as vaccine confidence increases and it will be harder still to assess the societal and economic impact of this visual loss. It is likely however that the BAME community will have suffered disproportionately, as with so many aspects of COVID-19, which has highlighted and magnified existing health inequalities.



**Fig. 1** Characteristics of retinal detachments presenting and drop in presentations during March and April comparing March and April 2020 with 2019. Black arrow illustrates a worse visual outcome.

Conor M. Ramsden<sup>1</sup>✉, Mehmet Ozturk<sup>2</sup>, Manjit Mehat<sup>3</sup>,  
Nicholas Brennan<sup>4</sup> and Louisa Wickham<sup>2</sup>

<sup>1</sup>West of England Eye Unit, Royal Devon and Exeter NHS Foundation Trust, Exeter EX2 5DW, UK. <sup>2</sup>Moorfields Eye Hospital NHS Foundation trust, London EC1V 2PD, UK. <sup>3</sup>Princess Alexandra Eye Pavilion, Edinburgh EH3 9HA, UK. <sup>4</sup>Department of Ophthalmology, Ninewells Hospital and Medical School, Dundee DD2 1SG, UK.

✉email: [conor.ramsden@nhs.net](mailto:conor.ramsden@nhs.net)

## REFERENCES

- Awad M, Poostchi A, Orr G, Kumudhan D, Zaman A, Wilde C. Delayed presentation and increased prevalence of proliferative vitreoretinopathy for primary rhegmatogenous retinal detachments presenting during the COVID-19 pandemic lockdown. *Eye*. 2021;35:1282–83. <https://doi.org/10.1038/s41433-020-1056-0>.
- Wickham L, Hay G, Hamilton R, Wooding J, Tossounis H, da Cruz L. et al. The impact of COVID policies on acute ophthalmology services—experiences from Moorfields

Received: 19 May 2021 Revised: 15 June 2021 Accepted: 7 July 2021  
Published online: 6 August 2021

- Eye Hospital NHS Foundation Trust. *Eye*. 2020;34:1189–92. <https://doi.org/10.1038/s41433-020-0957-2>.
3. Dervenis N, Heimann H, Hussain RN, Chua PY, Sandinha T, Vilà N. et al. The impact of COVID policies on the vitreoretinal service in St Paul's Eye Unit, Liverpool. *Eye*. 2021;35:1783–4. <https://doi.org/10.1038/s41433-020-1106-7>.
4. Patel LG, Peck T, Starr MR, Ammar MJ, Khan MA, Yonekawa Y. et al. Clinical presentation of rhegmatogenous retinal detachment during the COVID-19 pandemic: a historical cohort study. *Ophthalmology*. 2021;128:686–92. <https://doi.org/10.1016/j.ophtha.2020.10.009>.

#### **AUTHOR CONTRIBUTIONS**

Conception of the paper: all authors; data collection: CR, MO, MM, NB; analysis: CR, MM; manuscript preparation: all authors.

#### **COMPETING INTERESTS**

The authors declare no competing interests.

#### **ADDITIONAL INFORMATION**

**Correspondence** and requests for materials should be addressed to C.M.R.

**Reprints and permission information** is available at <http://www.nature.com/reprints>

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.