

# Pain, the driving force behind eye casualty attendance during the COVID-19 lockdown

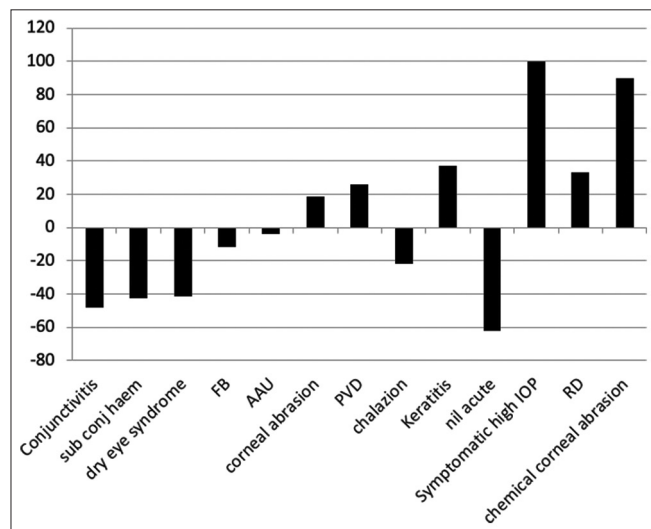
Dear Editor:

We read with interest your recent article "Differential diagnosis of acute ocular pain: Teleophthalmology during COVID-19 pandemic: A perspective"<sup>[1]</sup> and agree that pain is a very important factor to consider in triage of eye emergencies in

**Table 1: Table showing ranking of top 10 most common and top 4 sight threatening presentations**

	N PRE	N LOCK	ΔN	Δ%
TOTAL	831 (100%)	311 (100%)	-520	-62
Conjunctivitis	81 (9.8%)	16 (5.1%)	-65	-80
Dry eye syndrome	80 (9.6%)	17 (5.4%)	-63	-80
FB	63 (7.6%)	21 (6.7%)	-42	-66
Corneal abrasion	58 (7.0%)	26 (8.3%)	-32	-56
Keratitis	48 (5.9%)	25 (8.1%)	-23	-48
AAU	43 (5.2%)	17 (5.4%)	-25	-61
Nil acute	42 (5.0%)	6 (1.9%)	-36	-85
Chalazion	34 (4.1%)	10 (3.2%)	-19	-70
PVD	29 (3.5%)	14 (4.4%)	-15	-52
Sub conj hemorrhage	27 (3.3%)	6 (1.9%)	-21	-78
Retinal detachment	10 (1.2%)	5 (1.6%)	-5	-50
Symptomatic high IOP	9 (1.1%)	8 (2.6%)	-1	-12
Chemical corneal abrasion	8 (1.0%)	5 (1.9%)	-2	-24
Globe rupture	3 (0.4%)	3 (1.0%)	0	0

*n* - Number of presentations in pre lockdown and during lockdown periods with corresponding percentage of total cases. ΔN is the difference in absolute numbers attending and Δ% is the percentage reduction in absolute attendance



**Figure 1: Changes in pattern of presentation during lockdown against predicted volume of cases. Zero indicates that the number of presentations was the same as the expected number. Minus and plus 100 indicate a hundred per cent increase of presentations against the expected number. Globe rupture had a relative increase of 600% and was left out of the graph for clarity**

the context of COVID-19. We studied the factors driving eye casualty attendance during the COVID-19 lockdown and compared new presentations at our trust over a 2-week period pre-lockdown in March 2020 and 2 weeks during lockdown in April 2020.

Table 1 shows that despite a 62% reduction in total eye casualty attendance, painful ocular emergencies had a smaller reduction than painless presentations ( $P < 0.001$ ). Whereas mild conditions had up to 85% decrease in absolute numbers, severe conditions were less affected, ranging from 0% to 50% decrease ( $P < 0.001$ ). Within severe sight-threatening conditions, those associated with pain (high symptomatic IOP, chemical abrasions, globe ruptures) were more likely to present than painless conditions, such as retinal detachments [Table 1;  $P < 0.001$ ]. Comparison of observed presentations during lockdown with predicted cases pre-lockdown suggested that painful ocular presentations had a relative increase, including sight-threatening and non-sight-threatening presentations [Fig. 1] suggesting that these patients were more likely to come despite advice to stay home during lockdown. In comparison, painless sight-threatening presentations were less likely to present to eye casualty ( $P < 0.001$ ).

Ocular pain was the most important symptom bringing patients to hospital during the COVID-19 lockdown. However, our results show that many patients developing painless sight threatening conditions may be presenting late, with irreversible consequences for vision. Recent literature has shown late presentation of retinal detachments post lockdown with increased incidence of posterior vitreoretinopathy.<sup>[2]</sup> We agree that pain is an important factor but remind that triage tools must recognise painless sight threatening presentations and assure these are not missed.

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Nil.

### Conflicts of interest

There are no conflicts of interest.

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