

INTRODUCTION

Evaluating the nature of visits to the Ophthalmic emergency room (OER) and assessing the care given in this setting during the COVID-19 pandemic, can aid healthcare resource management in means of anticipating, preparing, and mobilizing resources to improve and mitigate treatment and morbidity.

OBJECTIVES

To compare OER visits during the COVID-19 pandemic to those during a control period.

METHODS

We compared all visits to the OER from March 15th to April 15th, 2020, during the Covid-19 pandemic, to the same period in 2019. Factors analyzed were patient demographics, chief complaints, referral patterns, exam findings, treatments given, hospitalizations and surgical interventions

RESULTS

1311 visits of 1158 patients were included, 477 during the 2020 COVID-19 pandemic and 834 during the same period in 2019. The demographic distribution was similar between the two periods. LogMAR visual acuity at presentation was worse during the COVID-19 pandemic (0.42 ± 0.6 and 0.34 ± 0.5 in 2020 and 2019 respectively; $p=0.025$) and the number of emergent surgeries was higher (3.8% in 2020 vs 1.8% in 2019, $p=0.024$). There was a higher likelihood of involvement of both segments of the eye (4.82% versus 1.2%, $p<0.01$) and more diagnoses were given to each patient (1 ± 0.5 versus 0.93 ± 0.35 , $p=0.001$); During the COVID-19 pandemic medications were prescribed more often (1.22 ± 0.95 in 2020 and 0.84 ± 0.67 in 2019, $p < 0.001$).

Figure 1: The distribution of patients by age; Inner circle 2019, outer circle 2020. No statistical difference was found between the age groups.

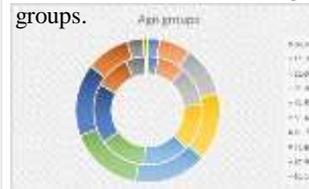
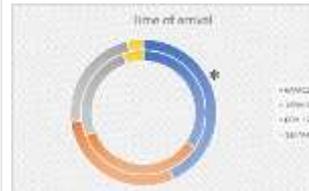


Figure 2: The time of day patients arrived at the emergency department; Inner circle 2019, outer circle 2020. Patients were more likely to arrive in the morning hours (6AM-12PM) in 2020 ($P=0.002^*$).



Variable	March-April 2019	March-April 2020	P Value
No trauma	676 (81%)	405 (85%)	$p=0.001$
Complaint duration, days ; mean (SD)	3.9 (7.8)	4.5 (7.8)	$p=0.22$
LogMar VA (Mean SD)			
CC eye	0.34 (0.5)	0.42 (0.6)	$p=0.025$
Fellow eye	0.26 (0.4)	0.23 (0.4)	$p=0.23$
Eye segment involved ; n (%)			
Both	10 (1.2%)	23 (4.8%)	$p<0.001$
Number of diagnoses ;mean (SD)	0.93 (0.35)	1.0 (0.5)	$p=0.001$
Two diagnoses and more ; n (%)	25 (3%)	43(9%)	$p<0.001$
Treatment ; n (%)			
Number of treatments ;mean (SD)	0.84 (0.67)	1.22(0.95)	$p<0.001$
Two or more treatments ; n (%)	97 (11.6%)	151 (31.6%)	$p<0.001$
Number of Auxiliary tests ; mean (SD)	1.02 (0.16)	1.06 (0.3)	$p<0.001$
Hospitalizations ; n (%)	28 (3.3%)	9 (1.9%)	$p=0.165$
Number of emergent surgeries	15 (1.8%)	18 (3.8%)	$p=0.042$

CONCLUSIONS

OER visits were less frequent during the COVID-19 pandemic as compared to 2019, though the demographics of the patients remained unchanged.

Visits during the pandemic tended to be for more severe ocular conditions and required more medical and surgical treatment.