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Short communication

Comparison of provision of maxillofacial emergency service during the two COVID-19 national lockdowns in the United Kingdom

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Abstract

We previously published a study on the provision of emergency maxillofacial services during the first UK COVID-19 pandemic national lockdown. We repeated the study during the second lockdown and now present our findings that highlight the main differences and learning issues as the services have evolved.

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Introduction

The global coronavirus (COVID-19) pandemic continues to be a burden on healthcare systems around the world. Following a resurgence of infection rates, the UK instituted a second national lockdown to control the spread of the virus from 5 November to 2 December 2020.\textsuperscript{1,2} We analysed the pattern of presentation and management of maxillofacial emergencies during the second lockdown, and compared the findings with those from the first lockdown.\textsuperscript{3}

Methods

This study included five maxillofacial units based at National Health Service (NHS) trusts: University Hospital Southampton, Western Sussex Hospitals (Chichester), Salisbury Hospital, Poole Hospital, and Portsmouth Hospitals. All emergency patients during the lockdown period were included, and data were collected prospectively using the custom-programmed online live database published in the first study.\textsuperscript{3}

Results

A total of 364 patients were seen. Of them, 327 were seen face to face and 37 were remote consultations. A total of 192 were trauma related, 113 were infections, and 22 were cases...
Table 1
Comparison of patient data related to face-to-face consultations between first and second lockdowns.

| Variables                                      | No. (%) of patients                          |
|------------------------------------------------|----------------------------------------------|
|                                                | First lockdown (n = 395)                    | Second lockdown (n = 327)                     |
| Median (range) age (years):                     | 42 (1-95)                                   | 41 (1-95)                                    |
| Gender:                                        |                                              |                                              |
| Male                                           | 206 (52)                                    | 183 (56)                                     |
| Female                                         | 189 (48)                                    | 144 (44)                                     |
| Source of referral:                            |                                              |                                              |
| A&E                                            | 287 (73)                                    | 260 (80)                                     |
| Dentist                                        | 34 (9)                                      | 14 (4)                                       |
| GP                                             | 21 (5)                                      | 16 (5)                                       |
| Other                                          | 53 (13)                                     | 37 (11)                                      |
| Care setting:                                  |                                              |                                              |
| Inpatient                                      | 77 (20)                                     | 79 (24)                                      |
| Outpatient                                     | 318 (81)                                    | 248 (76)                                     |
| Treatment modality:                            |                                              |                                              |
| Local anaesthetic                              | 201 (51)                                    | 128 (39)                                     |
| General anaesthetic                            | 35 (9)                                      | 39 (12)                                      |
| Non-surgical management / no treatment         | 158 (40)                                    | 160 (49)                                     |
| Grade of treating / consulting clinician:      |                                              |                                              |
| Consultant                                     | 49 (12)                                     | 31 (10)                                      |
| Middle grade                                   | 113 (29)                                    | 58 (18)                                      |
| DCT / FY                                       | 233 (59)                                    | 238 (73)                                     |
| If taken to theatre - time waiting (hours):    |                                              |                                              |
| 0-1                                           | 15/35 (43)                                  | 5/39 (13)                                    |
| 1-2                                           | 7/35 (20)                                   | 12/39 (31)                                   |
| 2-5                                           | 6/35 (17)                                   | 5/39 (13)                                    |
| 5-10                                          | 6/35 (17)                                   | 10/39 (26)                                   |
| 10+                                           | 1/35 (3)                                    | 7/39 (18)                                    |
| Patient’s COVID-19 status:                     |                                              |                                              |
| Unknown                                        | 373 (94)                                    | 270 (83)                                     |
| Positive (tested)                              | 0                                           | 1 (0.3)                                      |
| Suspected positive                             | 6 (2)                                       | 0                                            |
| Negative (tested)                              | 16 (4)                                      | 56 (17)                                      |
| Appropriate for remote consultation:           |                                              |                                              |
| Yes                                            | 67 (17)                                     | 40 (12)                                      |
| No                                             | 328 (83)                                    | 287 (88)                                     |

of postoperative complications. Further data are detailed in Table 1.

Discussion

There were a number of interesting differences in the provision of maxillofacial services during the two lockdowns. The like-for-like data comparison showed a higher daily rate of patient attendance (8/day in the first, 12/day in the second) during the second lockdown, and a higher proportion of patients presenting with injuries sustained outside the home. This could possibly be explained by the public being less compliant with the government’s advice to stay indoors during the second lockdown, further supported by the finding that there were significant increases in injuries related to road traffic accidents (Fig. 1). Educational institutions also remained open during the second lockdown, which may have contributed to these findings.

A number of studies (including ours\(^1\)) have demonstrated the value of remote consultations in healthcare.\(^4-7\) Despite their clear benefits and viability during the first lockdown, it has been surprising to find that they were poorly utilised by hospital trusts during the second. As the pandemic progressed, patients as well as clinicians may have become more comfortable with face-to-face meetings as personal protective equipment (PPE) became readily available.

The use of filtering face piece (FFP) masks was considerably reduced in the second lockdown compared with the first, with only 24 instances of their use logged when undertaking initial examinations - a 7% utilisation (Fig. 2). This appears to have been linked to increased confidence with interactions with patients because of a greater understanding of the risks of viral transmission and what constitutes an aerosol-generating procedure (AGP). Further guidance was available to healthcare providers, including the risks of AGP, fallow times, and the use of PPE and ventilation, and lessons have been learned from the first lockdown and ongoing research.\(^8-10\)

The cases related to domestic violence and self harm appear to have remained relatively high in the second lockdown, perhaps reflecting the ongoing impact of the pandemic.
on mental health. Compared with the first lockdown, we observed an increase in cases of interpersonal violence and in the incidence of facial fractures, possibly related to more socialising outside the home. The number of dental emergencies also increased despite the fact that dental providers remained open during the second lockdown, highlighting the need for further PPE support in primary care.

As we predicted in our previous study, the management of facial fractures seems to have reverted back to the principles used before the pandemic; where required, they were treated by open reduction and internal fixation compared with more conservative management during the first lockdown. Staff rota and redeployment were not utilised by hospital trusts in our region during the second lockdown, allowing for better use of resources and personnel to cover on-call and trauma.

The continuing and evolving nature of COVID-19 necessitates flexibility and adaptability in the specialty. The main differences between the two lockdowns reflect improved preparedness by clinicians and patients to deal with the virus as the pandemic progresses. Better understanding of transmission may have resulted in maxillofacial emergencies being managed in a similar way to the way they were managed before the pandemic started. This is reassuring as we continue with the risk of further waves in future. It is important that NHS trusts recognise the value of remote consultations, which should be embraced during the pandemic and possibly beyond.

**Ethics statement/confirmation of patients’ permission**

Institutional approval was obtained for the study. Patients’ consent was not required.

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**References**

1. Coronavirus (COVID-19) in the UK. The official UK Government website for data and insights on Coronavirus (COVID-19). UK summary. Available from URL: https://coronavirus.data.gov.uk/ (last accessed 1 April 2021).
2. (COVID-19) Coronavirus restrictions: what you can and cannot do. GOV.UK; 2020. Available from URL: https://www.gov.uk/guidance/local-restriction-tiers-what-you-need-to-know/ (last accessed 1 April 2021).
3. Blackhall KK, Downie IP, Ramchandani P, et al. Provision of emergency maxillofacial service during the COVID-19 pandemic: a collaborative five centre UK study. Br J Oral Maxillofac Surg 2020;58:698–703.
4. Al-Izzi T, Breeze J, Elledge R. Following COVID-19 clinicians now overwhelmingly accept virtual clinics in Oral and Maxillofacial Surgery. Br J Oral Maxillofac Surg 2020;58:e290–5.
5. Walters W, Collins T, Evans A. Additional cost in personal protective equipment to NHS services during COVID-19: a review of the expense incurred by Aneurin Bevan Healthboards Maxillofacial unit over a one-year period to meet current clinical guidelines. Br J Oral Maxillofac Surg 2020;58:e320–2.
6. Elledge R, Williams R, Fowell C, et al. Maxillofacial education in the time of COVID-19: the West Midlands experience. Br J Oral Maxillofac Surg 2020, http://dx.doi.org/10.1016/j.bjoms.2020.07.030 (Online ahead of print).

**Conflict of interest**

We have no conflicts of interest.
7. Al-Izzi T, Breeze J, Elledge R. Clinicians’ and patients’ acceptance of the virtual clinic concept in maxillofacial surgery: a departmental survey. Br J Oral Maxillofac Surg 2020;58:458–61.
8. New recommendations for primary and community health care providers in England. Public Health England, COVID-19: infection prevention and control (IPC). Available from URL: https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/new-recommendations-for-primary-and-community-health-care-providers-in-england (last accessed 1 April 2021).
9. Standard operating procedure: transition to recovery. A phased transition for dental practices towards the resumption of the full range of dental provision. Office of the Chief Dental Officer England (OCDO) 28 August 2020. Available from URL: https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/06/C0575-dental-transition-to-recovery-SOP-4June.pdf (last accessed 1 April 2021).
10. Scottish Dental Clinical Effectiveness Programme (SDCEP). Mitigation of aerosol generating procedures in dentistry. A rapid review. NHS Education for Scotland, 25 Sept 2020. Available from URL: https://www.sdcep.org.uk/wp-content/uploads/2021/01/SDCEP-Mitigation-of-AGPs-in-Dentistry-Rapid-Review-v1.1.pdf (last accessed 1 April 2021).