Variation in volumes and characteristics of hand trauma patients seen during the early COVID-19 lockdown in a central London Plastic Surgery Unit

Editor

The novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) causing Coronavirus disease (COVID-19). originating from Wuhan, China has now spread across the world^{1,2,3}. On 23rd March, the UK Government imposed a period of lockdown measures to reduce the person-to-person transmission rate (R_0) within the community⁴. The aim of the government's message of 'stay home, save lives, protect the NHS' was to reduce the number of patients with Coronavirus needing hospitalisation to within the capacity of the NHS.

We have not experienced living under lockdown measures during a global pandemic before and little is known about how this might affect the pattern and volume of injuries seen in hand trauma. In this study we examined how lockdown affected hand trauma clinic presentations at our tertiary Plastic Surgery Unit.

The British Association of Plastic Reconstructive and Aesthetic Surgeons (BAPRAS) issued an escalation policy⁵ which outlined the management of trauma depending on the prevalence of COVID-19 and its impact on the availability of hospital beds and ITU resources. The Association also led initiatives to raise awareness of tasks during lockdown, such as DIY, which could lead to traumatic injuries, diverting resources and NHS staff away from the COVID crisis.

We compared presentations during early lockdown (23rd March 2020 to 5th April 2020) to the same period the previous year (23rd March 2019 to 5th April 2019).

We included only adult patients (>18 years old). Patients were grouped according to age, gender, cause of

Table 1 Cause of Injury/ Reason for review				
	2019		2020	
DIY/Manual Work	n = 38	20.4%	n = 12	16.7%
Domestic	n = 26	14%	n = 15	20.8%
Fall	n = 26	14%	n = 7	9.7%
Post-operative review	n = 18	9.7%	n = 9	12.5%
Sports	n = 16	8.6%	n = 2	2.7%
Punched object	n = 12	6.5%	n = 5	6.9%
Finger trapped in door	n = 9	4.8%	n = 7	9.7%
Paronychia	n = 8	4.3%	n = 0	0%
Bites	n = 6	3.2%	n = 4	5.6%
Road Traffic Accident	n = 5	2.7%	n = 1	1.4%
Cosmetic Surgery Complication	n = 5	2.7%	n = 1	1.4%
Assault	n = 3	1.6%	n = 2	2.8%
DSH	n = 2	1.1%	n = 2	2.8%
Other	n = 12	6.5%	n = 5	6.9%

Domestic *e.g.* cooking knife injury, blender, broken plate/glass, gardening. DIY/work *e.g.* circular saw, hammer, screwdriver. Sports *e.g.* skiing, football, rugby. DSH, Deliberate Self Harm.

injury/ reason for review and outcome. We found that the gender and age demographics were almost identical between 2019 and 2020.

In 2019, during the above mentioned two-week period, 186 patients attended 193 times to the trauma clinic. This amounted to an average of nearly 14 (13.8) patients per day. During lockdown, only 72 patients attended 76 times, with an average between 5 to 6 (5.4) patients per day. This represented a 61% reduction in the number of patient visits.

During lockdown more procedures were done in trauma clinic than in theatre (80% vs 47%) and patients waited less time for their procedure (93% vs 46% on initial day of presentation).

Table 1 demonstrates the characteristics of the injuries seen.

We saw a reduction in the number of injuries that were sustained through DIY/manual work; a reduction in the number of fall related injuries; and an increase in the number of domestic injuries and fingers trapped in doors. This likely reflects people adhering to the 'stay at home message', with fewer individuals e.g. in construction going to work, less people leaving their house and meeting trip hazards, and more people spending a greater time cooking at home.

This study demonstrates a significant reduction in the number of patients that presented to our tertiary Plastic Surgery Trauma Clinic during early lockdown. The change in the volume and characteristics of hand trauma presentations, largely reflects a change in lifestyle and activities of the population during lockdown following government advice to 'stay home, save lives, protect the NHS'. Yet, there is a concern that the fear of attending hospital, due to the risk of contracting Coronavirus, has led to a delay in seeking treatment. In accordance with BAPRAS advice, individuals should continue to avoid or show greater vigilance with tasks which could lead to traumatic injuries, such as DIY and cooking. If a serious injury is sustained however, medical advice should still be sought without delay.

Disclosure Statement

S Rinkoff has nothing to declare. B Jemec has nothing to declare.

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