laparotomy for a perforated GDU especially if unwell and/or are unable to wait for transfer to a tertiary centre, or if there is a delay to theatre due to transfer to a tertiary hospital.

Author contributions

Vidya Seenarain: Data curation; formal analysis; investigation; methodology; project administration; writing-original draft; writing-review & editing. **Tamalee Wilson:** Writing-review & editing. **David Fletcher:** Supervision; writing-review & editing. **Amanda Foster:** Conceptualization; methodology; supervision; writing-review & editing.

References

1. Tarasconi A, Coccolini F, Biffl WL *et al*. Perforated and bleeding peptic ulcer: WSES guidelines. *World J. Emerg. Surg.* 2020; **15**: 3.
2. Sanabria A, Villegas MI, Morales Uribe CH. Laparoscopic repair for perforated peptic ulcer disease. *Cochrane Database Syst. Rev.* 2013; **2**: 1–23.
3. Siow SL, Mahendran HA, Wong CM, Hardin M, Luk TL. Laparoscopic versus open repair of perforated peptic ulcer: improving outcomes utilizing a standardized technique. *Asian J. Surg.* 2016; **41**: 136–42.
4. Mouly C, Chati R, Scotté M, Regimbeau JM. Therapeutic management of perforated gastro-duodenal ulcer: literature review. *J. Visc. Surg.* 2013; **150**: 333–40.
5. Muller MK, Wrann S, Widmer J, Klasen J, Weber M, Hahnloser D. Perforated peptic ulcer repair: factors predicting conversion in laparoscopy and postoperative septic complications. *World J. Surg.* 2016; **40**: 2186–93.
6. Guadagni S, Cengeli I, Galatioto C *et al*. Laparoscopic repair of perforated peptic ulcer: single-center results. *Surg. Endosc.* 2014; **28**: 2302–8.
7. Zimmermann M, Hoffmann M, Laubert T, Jung C, Bruch HP, Schloericke E. Conversion of laparoscopic surgery for perforated peptic ulcer: a single-center study. *Surg. Today* 2015; **45**: 1421–8.

Supporting information

Additional Supporting Information may be found in the online version of this article at the publisher's web-site:

Figure S1. The number of years of experience as a consultant general surgeon.

Vidya Seenarain,*†‡ MBBS (Hons), BSC
Tamalee Wilson,† MBBS
David R. Fletcher,†‡ AM, MBBS, MD, FRACS, GAICD
Amanda J. Foster,†‡ BMedSci (Hons), FRACS
*Division of Surgery, Medical School, The University of Western Australia, Perth, Western Australia, Australia, †Department of General Surgery, Fiona Stanley Hospital, Perth, Western Australia, Australia and ‡Division of Surgery, Medical School, The University of Western Australia, Perth, Western Australia, Australia

doi: 10.1111/ans.16770

Alcohol-related acute pancreatitis: Lessons learnt during the COVID-19 lockdown in Victoria

In response to the COVID-19 pandemic, social distancing measures were introduced in Australia in mid-March 2020. While isolation at home has undoubtedly had an immediate and important role in controlling the pandemic, the health effects of long-term isolation are unclear.[1] Specifically, the ways in which the stress, boredom and the isolation of physical distancing might affect drinking patterns are unknown. The Foundation for Alcohol Research and Education poll of >1000 Australians during the early lockdown period in April 2020 found that >20% of respondents reported buying more alcohol than usual since the outbreak, 70% were drinking more alcohol and 34% were drinking daily.[2] Twenty-eight percent reported they were drinking alcohol to cope with anxiety and stress and 32% were concerned with the amount they were drinking.

Alcohol, together with gallstones, account for up to 80% of presentations with acute pancreatitis (AP) in Australia[3] and can be associated with significant morbidity and mortality.[4] With an initial observation of more severe AP presenting at our institution early during the lockdown period, a more systematic and comparative approach to understand this observation was undertaken.

Patients with a diagnosis of AP were identified by a hospital coding search over the lockdown period (March–July 2020) at Peninsula Health, Frankston. This was compared with the same time period in 2019. Severity was assessed using the Revised Atlanta Criteria for Acute Pancreatitis Severity[5] and inferential statistics with Fisher's exact test were used to establish association. The study was approved by the Peninsula Health Human Research and Ethics Committee.

After exclusion of non-AP patients and duplications, 118 and 112 cases of AP were identified for 2019 and 2020, respectively (Table 1). No patient had COVID-19 infection in the 2020 group. A higher proportion of severe pancreatitis was found for 2020, with only one of 118 (0.8%) case classified as severe in 2019 and seven of 112 (6.2%) cases in 2020 ($p = 0.032$). This is also reflected with more mild cases of AP in 2019 (109/118; 92%) compared to 2020 (91/112; 81%) ($p = 0.02$). The 2019 rate of severe AP was comparable to what has been published for our institution in the past, approximately 0.7%.[4] Alcohol was more commonly attributed as the cause of AP in 2020 (34/112; 30%) compared to 2019 (20/118; 17%) ($p = 0.046$). Of those with severe AP in 2020, five of seven (71%) were caused by alcohol.

© 2021 Royal Australasian College of Surgeons

Table 1 Baseline characteristics of patients with AP in 2019 and 2020

	Year		*p*-Value
	2019	2020	
Number	118	112	
Gender			
Male	62	56	0.89
Female	56	55	
Transgender	0	1	
Severity			
Mild	109	91	0.02
Moderate	8	14	0.18
Severe	1	7	0.032
Aetiology			
Gallstones	36	35	1
Alcohol	20	34	0.046
ERCP	4	5	0.74
Other	7	11	0.33
Idiopathic	51	27	0.003

AP, acute pancreatitis; ERCP, endoscopic retrograde cholangiopancreatography.

Compared to the same time period in 2019, there was a higher proportion of alcohol-related AP during the lockdown period at Peninsula Health in 2020, along with more severe cases. Conversely, however, there were more cases of idiopathic AP in 2019 (51/118; 43%) compared to 2020 (27/112; 24%) ($p = 0.003$). This shows the limitation of a retrospective study, and similarly a possible reporting and/or recall bias. Admitting doctors may have been more likely to enquire about and record alcohol consumption patterns in 2020, and patients may be more likely to truthfully report their drinking patterns during the lockdown. Furthermore, with only seven cases of severe AP, it is not the intention of this paper to directly attribute the higher rates of alcohol-related AP and severe AP to the lockdown alone. Nonetheless, this study does strengthen the public health messages related to the harms of alcohol and the need for support from alcohol liaison services. Furthermore, patients with AP may be presenting to hospital later with more established forms of the condition due to the general anxiety of being in and around healthcare services during the pandemic. This potential consequence of patient reluctance to attend emergency departments during the COVID-19 crisis supports the messaging around seeking medical care when unwell.

Acknowledgement

The authors would like to acknowledge and thank Dr Vicky Tobin.

Data availability statement

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

References

1. The Lancet Gastroenterology & Hepatology. Drinking alone: COVID-19, lockdown, and alcohol-related harm. *Lancet Gastroenterol Hepatol*. 2020;**5**:625.
2. Australian Institute of Health and Welfare. Alcohol, tobacco & other drugs in Australia, impact of COVID-19 on alcohol and other drug use [Internet]. https://www.aihw.gov.au/reports/alcohol/alcohol-tobacco-other-drugs-australia/contents/impacts/impact-of-covid-19-on-alcohol-and-other-drug-use. Accessed 5 Sept 2020.
3. Nesvaderani M, Eslick GD, Cox MR. Acute pancreatitis: update on management. *Med J Aust*. 2015;**202**:420–3.
4. Shilton H, Breen D, Gupta S, Evans P, Pilgrim C. Multiple interventions with prolonged length of stay are required for treatment of necrotizing pancreatitis. *ANZ J Surg*. 2018;**88**:E162–6.
5. Banks PA, Bollen TL, Dervenis C, Gooszen HG, Johnson CD, Sarr MG, et al. Classification of acute pancreatitis–2012: revision of the Atlanta classification and definitions by international consensus. *Gut*. 2013;**62**:102–11.

Damir Ljuhar, MBBS (Hons), MPHTM
Hasanga Jayasekera, MBBS, FRACS
Yegi Sandy Kim, BMedSc, MD
Peter Evans, FRACS, MPH
Charles Pilgrim, FRACS, PhD
Department of Surgery, Peninsula Health, Frankston, Victoria, Australia

doi: 10.1111/ans.16938

Supply and demand: an audit of specialty paediatric surgical outreach

Providing specialist paediatric surgical care within Australia and New Zealand (NZ) poses unique challenges due to the unusual geography, distances involved and population distribution of the two countries. Thirty percent of the Australian paediatric population, or 1.3 million children (0–14 years)[1] live outside major cities, limiting access to paediatric surgical care. Similar issues are faced in NZ where four paediatric surgical services cover a population of 4.5 million, with one quarter living outside urban areas.[2]

In 2017, Royal Australasian College of Surgeons (RACS) released a position paper, outlying guidelines for the provision of paediatric surgery outside of tertiary facilities.[3] A 10-point plan was developed, encouraging outreach to support and educate local surgeons and to establish networks for education and transfer.

To assess the extent of outreach services provided a survey was emailed to Australian and New Zealand Association of Paediatric Surgeons members using an online platform. A survey link was emailed to Paediatric Surgery Heads of Departments to reach Paediatric Surgeons that were not Australian and New Zealand Association of Paediatric Surgeons members with results collected between 2018 and 2019.

© 2021 Royal Australasian College of Surgeons