COVID-19 and psychiatric illness: rectal foreign bodies (30 stylus batteries) in a young male patient affected by Asperger syndrome

Federico Lovisetto\textsuperscript{1,\*}, Andrea Guala\textsuperscript{2}, Giuseppe Facciotto\textsuperscript{3} and Sandro Zonta\textsuperscript{1}

\textsuperscript{1}Division of General Surgery, Castelli Hospital, 28992 Verbania, Italy, \textsuperscript{2}Division of Paediatrics, Castelli Hospital, 28922 Verbania, Italy and \textsuperscript{3}Division of Endoscopy, Castelli Hospital, 28922 Verbania, Italy

\*Correspondence address. Division of General Surgery, Castelli Hospital, Via Mazzini 117, Omegna, 28992 Verbania, Italy. Tel: +390323541665; Fax: +390323541530; E-mail: fedelovi@yahoo.com

Abstract
Here we present the case of a 17-year-old male patient, affected by Asperger syndrome, who reached the emergency division of our hospital after anal insertion of some stylus batteries. Transanal extraction of 30 stylus batteries avoided surgical intervention. Lockdown and boredom due to the strict domestic quarantine policies adopted during COVID-19 pandemic might have unmasked in our patient a susceptibility to unhealthy behaviour.

INTRODUCTION
Stay-at-home orders due to COVID-19 pandemic forced all of us to experience a critical time. The adverse psychological effects related to the lockdown might reveal a susceptibility to unhealthy behaviour in subjects with mental disorders. This probably happened to our 17-year-old male patient affected by Asperger syndrome and without previous episodes of oral ingestion/anal insertion of foreign bodies. He reached the emergency division of our hospital after anal insertion of 30 stylus batteries.

CASE REPORT
In May 2020, a 17-year-old male patient affected by Asperger syndrome reached the emergency division of our hospital with abdominal pain. He referred anal insertion of some stylus batteries 2 hours before admission. No previous episodes of unhealthy behaviour (such as oral ingestion/anal insertion of foreign bodies) had been manifested in his lifetime, apparently.

At hospitalization, the clinical examination revealed moderate pain in the lower left part of the abdomen. Laboratory analyses demonstrated moderate neutrophilic leukocytosis. Abdominal X-rays revealed the presence of many radiopaque foreign bodies on the projection of the rectum, referable to stylus batteries (Figs 1 and 2).

The patient underwent to transanal extraction under pharmacological sedation, partly through digital removal and partly through endoscopic removal. In total, 30 stylus batteries were extracted (total weight: \raisebox{-0.5pt}{\$}2 pounds).

The subsequent abdominal X-rays demonstrated the complete absence of further foreign bodies (Fig. 3).

The patient had an uneventful clinical course and was discharged the day after.

DISCUSSION
People with mental disorders may be particularly vulnerable to the psychological stress associated with the COVID-19 pandemic [1]. The disease not only affects the physical health of people, but...
also their psychological health. The strict domestic quarantine policies adopted to control the transmission of COVID-19 might have adverse psychological effects and might exacerbate pre-existing conditions such as depression and anxiety, especially in people with mental disorders [2, 3]. Lockdown and boredom may unmask a susceptibility to unhealthy behaviour. In fact, it is well described by psychiatrists, a short-time deterioration and improvement at the symptomatic level in patients with depression, anxiety and obsessive-compulsive disorders [3]. Recent findings about the levels of stress or anxiety in response to the COVID 19 are similar to those reported during previous pandemic (such as SARS and 2009 H1N1 pandemic), highlighting that anxiety is an important driver of behaviour [4–7].

Our patient is affected by Asperger syndrome, a subtype of autism spectrum disorders characterized by significant problems in social interaction and non-verbal communication, restricted and repetitive forms of behaviour and interests [8]. No previous episodes of unhealthy behaviour had been manifested in his lifetime. Transanal extraction of 30 stylus batteries avoided surgical intervention. In our opinion, isolation and loneliness due to quarantine measures may have exacerbated the mental illness and triggered the unhealthy behaviour. Two months after the episode, we investigated our patient about his stress responses related to the pandemic using the 36-item COVID Stress Scale [4]. The results suggested that he exhibits fear and anxiety-related distress responses to the pandemic, corroborating our hypothesis.

In conclusion, the early intervention and careful vigilance for signs of psychiatric illness is very important in this critical time [9], with implementation and optimization of the departments of mental health [10].

CONFLICT OF INTEREST STATEMENT
None declared.

FUNDING
None.

REFERENCES
1. Rohde C, Hougaard Jefsen O, Nørremark B, Aalkjær Danielsen A, Østergaard SD. Psychiatric symptoms related to the COVID-19 pandemic. Acta Neuropsychiatr 2020;32:274–6.
2. Liu JJ, Bao Y, Huang X, Shi J, Lu L. Mental health considerations for children quarantined because of COVID-19. Lancet Child Adolesc Health 2020 May;4:347–9.
3. Vinkers CH, van Amelsvoort T, Bisson JI, Branchi I, Cryan JF, Domschke K, et al. Stress resilience during the coronavirus pandemic. Eur Neuropsychopharmacol 2020 Jun;35:12–6.
4. Taylor S, Landry CA, Paluszek MM, Fergus TA, McKay D, Asmundson GJG. Development and initial validation of the COVID Stress Scales. *J Anxiety Disord* 2020 May;72:102232.

5. Cheng SKW, Wong CW, Tsang J, Wong KC. Psychological distress and negative appraisals in survivors of severe acute respiratory syndrome (SARS). *Psychol Med* 2004;34:1187–95.

6. Rubin GJ, Amlôt R, Page L, Wessely S. Public perceptions, anxiety, and behaviour change in relation to the swine flu outbreak: cross sectional telephone survey. *Br Med J* 2009;339:b2651.

7. Wheaton MG, Abramowitz JS, Berman NC, Fabricant LE, Olatunji BO. Psychological predictors of anxiety in response to the H1N1 (swine flu) pandemic. *Cogn Ther Res* 2012;36:210–8.

8. Faridi F, Khosrowabadi R. Behavioral, cognitive and neural markers of Asperger syndrome. *Basic Clin Neurosci* 2017 Sep–Oct;8:349–59.

9. Yahya AS, Khawaja S, Chukwuma J. The impact of COVID-19 in psychiatry. *Prim Care Companion CNS Disord* 2020 Apr;22.

10. D’Agostino A, Demartini B, Cavallotti S, Gambini O. Mental health services in Italy during the COVID-19 outbreak. *Lancet Psychiatry* 2020 May;7:385–7.