

CASE REPORT**Childhood Dermatitis Artefacta and the Covid-19 Pandemic**

Tang Swee Ping and Anayasmin binti Azmi

**Department of Paediatrics,
Hospital Selayang, Selangor, Ministry of Health, Malaysia**

Abstract

The Covid-19 pandemic has spread rapidly across the globe resulting in widespread illness and deaths. Mitigation measures including severe lockdowns have been implemented in many countries including Malaysia, resulting in negative psychological effects on the population in general but more so in children who are especially vulnerable. School closures and social isolation has resulted in disruption of normal routines and social infrastructures leaving a deleterious effect on the mental wellbeing of children. Children of front liners have an added risk due to the physical or mental absence of parental companionship during the pandemic. Here we report a case highlighting the negative psychological impact of the Covid-19 pandemic on a young male child with front liner parents manifesting as Dermatitis artefacta.

Keywords: Covid-19, Dermatitis Artefacta, Child, Psychological

Introduction

The novel coronavirus, SARS CoV-2 first caused a respiratory outbreak in Wuhan, China in late December 2019. It has since swept across the globe and in barely 6 months, afflicted more than 5 million people with the coronavirus disease 2019 (COVID-19) and leaving a trail of deaths. Numerous countries have implemented lockdown measures to mitigate its spread and with these, travels were halted, schools and businesses were closed overnight. In Malaysia, the Movement Control Order (MCO) was implemented on 18th March

2020 with strict restrictions on movement and the public told to 'stay at home' [1]. Such radical disruptions to the normal routines of daily life can cause mental deterioration of the general public. Children are not spared, and the negative psychological impacts of any pandemic are being increasingly recognised [2, 3]. Dermatitis artefacta is a factitious psychological skin disorder that is rarely reported in children [4, 5]. We report a case of Dermatitis artefacta in a young male child with front liner parents consequent to the negative psychological impact of the Covid-19 pandemic.

Case Report

A healthy 9-year old boy presented with sudden onset of spontaneous bruises initially affecting his right, then his left upper limb over two days. The child was otherwise systemically well with no history of fever, preceding infection, or trauma. He did not have gum bleeding, epistaxis, or other bleeding tendencies. Neither the child nor his parents could explain the origin of the bruises.

Physical examination was normal apart from the said bruises and the child well thrived. He had multiple well-defined oval-shaped ecchymoses of varying sizes (average of 2.5 cm x 1.5 cm) in a symmetrical linear pattern over the flexor aspects of both arms and forearms. He also had two ecchymoses over his anterior chest wall (each about 3 x 2 cm) located one centimetre above each nipple. There were no other ecchymoses and no signs of trauma to his oral cavity or perianal region. His full blood count and coagulation profile were normal.

Both parents are law enforcement officers who were on frontline duty battling the Covid-19 pandemic for the 5 weeks prior to his presentation, whilst he was cared for by his 12-year old brother. He was initially suspected to have been physically abused by his elder brother but the development of new bruises whilst hospitalised alone overnight revealed that it was self-inflicted supporting the diagnosis of Dermatitis artefacta. A psychiatric assessment exposed increasing family conflicts with frequent parental arguments due to work stress and changes in work schedules disrupting their daily routines and childcare arrangements. There were also minor elements of bullying by the elder sibling. The boy admitted being distressed by the parental quarrels and worried about the consequences of potential

parental separation.

Discussion

To the best of our knowledge, this is the first case of Dermatitis artefacta reported in a child associated with the psychological consequences of the Covid-19 pandemic. Dermatitis artefacta (DA) is a factitious disorder where skin lesions are self-inflicted to cope with an unconscious emotional or psychological need, often with hidden secondary gain [4, 5].

DA predominantly affects young adult and teenage females but is rare in children especially under the age of 8 years [6-8]. Thus, our patient is atypical for DA in terms of age and gender. However, the purpuric nature in the absence of bleeding disorders and the isolated symmetrical linear pattern of skin lesions over easily accessible body sites are clues of this diagnosis [7, 8]. Whilst skin lesions may sometimes be inflicted out of curiosity or in response to peer pressure in normal children, DA may be a 'cry for help' in children enduring unbearable psychological stress as exemplified by our patient [7].

The negative psychological impacts of any pandemic are well known and children are known to be more vulnerable when compared to adults [2]. The Covid-19 pandemic is no exception having mandated MCO in Malaysia [1]. Social isolation during such lockdowns may lead to stress, grief, depression, anxiety, and adjustment disorders in children [2, 9]. Mandatory school closures have also resulted in a loss of essential psychological support from their peers [10, 11]. Basic childhood tools which are normally required for resilience building especially in adversity such as maintenance of normal routines and social infrastructures are disrupted leaving children with a sense

of unpredictability and insecurity [2, 12].

In such times, a caring adult often in the form of parents, is necessary to provide support, honest and sensitive information, and to ease the stress of the pandemic [12, 13]. Parental companionship is indeed vital for the psychological development and well-being of any child [14]. Unfortunately for our patient, the parental companionship was absent as both parents are front liners, who not only had to continue working but also for longer hours and with revised working schedules disrupting their usual childcare arrangements. When parents are absent, other adults such as grandparents or extended family members may take on this role but due to the MCO, this was also not possible as social support and extended families were kept apart.

Even when parents are not working, the parent-child relationship is often altered by their professional roles. Some front liners choose to distance themselves from their families due to fear of contamination or there may be no hugging or sleeping together even when home [2]. Parents themselves may also be under stress as seen in our patient, and suffer from anxiety, depression, or insomnia [15]. This change in parental mental status may be perceived as a threat to the child which can lead to further anxiety [12]. Parents may also fail to detect or respond to clues and distress signals from their children due to their own fatigue or pre-occupation with Covid-19 [16]. Children may also have fears of their parents being infected or dying.

Conclusion

We have shown that the Covid-19 pandemic can have significant impact on the psychological well-being of children even after a short period and can manifest as

dermatitis artefacta. The absence of parental companionship should be considered a significant risk factor for children of front liners and merit further attention.

Acknowledgement

We would like to thank Director General of Health Malaysia for his permission to publish this article.

References

- [1] Federal Government gazette. Prevention and Control of Infectious Diseases (Declaration of Infected Local areas) Order 2020. 17th March 2020. http://www.federalgazette.agc.gov.my/output/pua_20200317_PUA87.pdf. Accessed 26th May 2020.
- [2] Sprang G, Silman M. Posttraumatic Stress Disorder in Parents and Youth After Health-Related disasters. *Disaster Med Public Health Preparedness* 2013; 7:105-110.
- [3] Let's not overlook psychosocial and mental wellbeing of children during covid-19 – Malaysia Council for Child Welfare - (cited 2020 April 28). Available from: <http://www.malaymail.com/news/what-you-think/2020/04/24/lets-not-overlook-psychosocial-and-mental-wellbeing-of-children-during-covi/1859967>. Accessed 26th May 2020.
- [4] Krahn L, Li H, O'Connor M. Patients who strive to be ill: factitious disorder with physical symptoms. *Am J Psychiatry* 2003; 160: 1163–1168.

- [5] Gieler U , Consoli SG, Tomás-Aragones T, Linder DM, Jemec GBE, Poot F, et al. Self-inflicted Lesions in Dermatology: Terminology and Classification--A Position Paper From the European Society for Dermatology and Psychiatry (ESDaP) *Acta Derm Venereol* 2013 Jan;93(1):4-12. doi: 10.2340/00015555-1506.
- [6] Sneddon I, Sneddon J. Self-inflicted injury: a follow-up study of 43 patients. *Br Med J*. 1975 Aug 30;3(5982):527–530.
- [7] Moss C. Dermatitis artefacta in children and adolescents. *Paediatrics and Child Health J*. 2015; 25(2):84-89. DOI:https://doi.org/10.1016/j.paed.2014.10.03.
- [8] Saez-de-Ocariz M , Orozco-Covarrubias L, Mora-Magaña I, Duran-McKinster C, Tamayo-Sanchez L, Gutierrez-Castrellon P et al. Dermatitis Artefacta in Pediatric Patients: Experience at the National Institute of Pediatrics. *Pediatr Dermatol* May-Jun 2004;21(3):205-11. doi: 10.1111/j.0736-8046.2004.21303.x.
- [9] Xie X, Xue Q, Zhou Y et al. Mental Health Status Among Children in Home Confinement During the Coronavirus Disease 2019 Outbreak in Hubei Province, China. *Jama Pediatrics* E1-E2, Published online April 24, 2020. Doi:10.1001/jamapediatrics.2020.1619.
- [10] Lee J. Mental health effects of school closures during COVID-19. *Lancet Child Adolesc Health* 2020. Published online April 14,2020. [https://doi.org/10.1016/S2352-4642\(20\)30109-7](https://doi.org/10.1016/S2352-4642(20)30109-7).
- [11] Pandemic school closures: risks and opportunities. Editorial. *Lancet Child Adolesc Health*. www.thelancet.com/child-adolescent Vol 4, May 2020. Published Online April 8, 2020. [https://doi.org/a0/1016/S2352-4642\(20\)30105-X](https://doi.org/a0/1016/S2352-4642(20)30105-X).
- [12] Dalton L, Rapa E, Stein A. Protecting the psychological health of children through effective communication about Covid-19. *Lancet Child Adolesc Health* 2020. Published Online March 31, 2020. [https://doi.org/10.1016/S2352-4642\(20\)30097-3](https://doi.org/10.1016/S2352-4642(20)30097-3).
- [13] Wang G, Zhang Y, Zhao J, Zhang J, Jiang F. Mitigate the effects of home confinement of children during the COVID-19 outbreak. *Lancet* 2020; Published online March 4. [https://doi.org/10.1016/S0140-6736\(20\)30547-X](https://doi.org/10.1016/S0140-6736(20)30547-X).
- [14] WHO. The importance of caregiver-child interactions for the survival and healthy development of young children: a review. Geneva: World Health Organisation; 2004.
- [15] Spoorthy MS, Mental health problems faced by healthcare workers due to the COVID-19 pandemic – a review. *Asian Journal of Psychiatry* (2020), <https://doi.org/10.1016/j.ajp.2020.10.2119>.
- [16] Stein A, Lehtonen A, Harvey AG, Nicol-Harper R, Craske M. The

influence of postnatal psychiatric disorder on child development. Is maternal preoccupation one of the

key underlying processes?
Psychopathology 2009; 42:11-21.

Corresponding Author

Dr Tang Swee Ping,
Department of Paediatrics,
Selayang Hospital,
68100 Batu Caves,
Malaysia

Email: tangsweeping@gmail.com