# Noma disease outside the typical age brackets in 4 patients. Is there a missing link in the possible etiopathogenesis?

# \*BRAIMAH RO, \*\*TAIWO AO, \*\*\*OLASOJI HO, \*\*\*SULEIMAN IK, \*BALA M, \*\*\*\*OKETADE IO

\*Department of Oral & Maxillofacial Surgery, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria. \*\*Department of Oral & Maxillofacial

Surgery, Faculty of Dental Sciences, Usmanu Danfodiyo University, Sokoto, Nigeria.

\*\*\*Department of Oral and Maxillofacial Surgery, University of Maiduguri Teaching Hospital, Bama Road, Maiduguri, Borno State, Nigeria. \*\*\*\*Department of Oral and Maxillofacial Surgery, University College Hospital, Ibadan, Oyo State.

## Correspondence

Dr Ramat O. Braimah Department of Oral & Maxillofacial Surgery, Usmanu Danfodiyo University Teaching Hospital Sokoto, Nigeria. E-mail: robdeji@yahoo.com

**Citation: Braimah RO, Taiwo AO, Olasoji HO, Suleiman IK, Bala M, Oketade IO** (2023). Noma disease outside the typical age brackets in 4 patients. Is there a missing link in the possible etio-pathogenesis? Nig J Med Dent Educ; 5(1):c13-c14.

#### INTRODUCTION

Noma is an orofacial gangrene that absolutely affects extremely impoverished and malnourished children in the tropics, with an estimated incidence of 8.3 per 100,000 population (Bello et al., 2019) and 3,300 per 100,000 children aged 0-15 years (Farley et al., 2018) in the north central zone and north west zones respectively estimated the community-based point prevalence in the northwest was 3,300 out of every 100,000 children aged 0–15 years.

The majority of cases reported to occur between ages 2-7 years (Enwonwu et al., 2006). However, the

Nigerian Journal of Medical and Dental Education

Volume 5 Issue 1 January-June 2023

disease occurrence outside the reported age brackets is still not well researched, hence the justification for the current case series. Literature search revealed documentations of Noma among adults as case reports and dates as far back as 1911 where King (1911) reported a case of Noma in a 59year-old female in New Orleans, USA, to recently reported by Traore et al, (2021) where Noma was described in a 32-year-old female in Bamako, Mali. No study on the presentation of a case series on Noma among patients older the usual age bracket was seen in the literatures wherein we present four cases of such. The objective of the study was to determine the possibility of a missing link in the etiopathogenesis of noma in patients outside the known age bracket

## MATERIALS AND METHODS

Cases of Noma presenting outside the usual age brackets in the Department of Oral and Maxillofacial Surgery, Usmanu Danfodiyo University Teaching Hospital, Sokoto and University of Maiduguri Teaching Hospital, Maiduguri, Nigeria from June 2021- June 2022 were included. Data retrieved comprise: Socio-demographics, co-morbid medical conditions, management and outcome.

# RESULTS

A total of 4 patients (2 males and 2 females) were managed over the review period with ages/gender (15years/F, 35years/M, 37years/F and 7oyears/M). We queried myelodysplastic syndrome in the 35year/male because of recalcitrant severe anemia (PCV<20%) despite several blood transfusions (patient in the process of bone marrow biopsy). In the 15-year-old, only retarded growth was noticed. All four cases had deranged albumin. No other comorbid conditions were observed in the patients. Molecular characterization of possible organisms and micro-nutrient evaluation is underway to further investigate the disease condition in these patients. The patients had serial debridement with honey dressing. All patients survived the acute phase of the disease.

#### CONCLUSION

We opined the possibility of a missing link in the etiopathogenesis of this neglected tropical disease condition. While further molecular investigations are ongoing, knowledge and awareness of Noma disease especially in adults requires "outside-the-box" research to unravel the underline reasons in these age brackets.

#### **REFERENCES:**

- Bello SA, Adeoye JA, Oketade I, Akadiri OA. (2019) Estimated incidence and Prevalence of noma in north central Nigeria, 2010-2018: A retrospective study. PLoS Negl Trop Dis; 13(7): e0007574.doi: 10.1371/journal.pntd.0007574.
- Enwonwu CO, Falkler WA, Jr, Philips RS (2016). Noma (cancrum oris) Lancet; 368: 147-156
- Farley E, Lenglet A, Ariti C, Jiya NM, Adetunji AS, van der Kam S, Bil K (2018). Risk factors for diagnosed noma in northwest Nigeria: A casecontrol study, 2017. PLoS Negl Trop Dis; 12(8):e0006631.doi:10.1371/journal.pntd.0006 631.
- King, HD (1911). Noma (Cancrum Oris) in an adult, with report of a case. JAMA; LVI(20):1449-1451. doi:10.1001/jama.1911.02560200017011.
- Traore H, Sogodogo E, Coulibaly A, Toure A, Thiocary S, Sidibé MD, et all (2021). Case report: a rare case of NOMA (cancrum oris) in a Malian woman. New Microbes New Infect; 42:100907. doi: 10.1016/j.nmni.2021.100907.