

# Appreciable antagonism Bistorta, Potentilla and calamine manifests towards bruises in COVID-19 $\mu$ variant

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Sir,

The World Health Organization (WHO) affirms that it is closely monitoring a new variant of COVID-19 called  $\mu$  reported earlier this year in South America and now also present in Europe.

For the first time in its recent epidemiological update, WHO called this mutation a “variant of interest”.

Mu was first identified in Colombia in January 2021, and cases and outbreaks have since been “sporadically reported” in South America and Europe, WHO has right confirmed.

While the global prevalence of  $\mu$  is less than 0.1% among sequenced COVID-19 cases, its prevalence has “steadily increased” in Colombia and Ecuador, where it now accounts for about 39% and 13% of infections, respectively.

Reports of variant prevalence should be “interpreted with due consideration” given the low sequencing capacity of most countries, the global health agency said.

Mu is the fifth “variant of interest” to be monitored by WHO since March 2020. It “has a constellation of mutations” that suggest it may be more resistant to vaccines, the UN agency warned while stressing that more research would be needed to confirm this.

Preliminary data show reduced vaccine efficacy “similar to that observed for the Beta variant,” identified in

South Africa. Messenger RNA vaccines remain 77% effective against the Beta variant.

WHO proclaimed it would monitor “the epidemiology of the Mu variant in South America, particularly with the co-circulation of the Delta variant, for changes.

The newly named  $\mu$  variant was already classified as a “variant of interest” in a list published by the European Centre for Disease Prevention and Control (ECDC) on August 26, the same date the A of this modest letter contracted this erratic and bizarre variant.

As of September 1, the ECDC states that the variant has been detected “sporadically” in several European countries including Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Portugal, Spain, the Netherlands and the UK.

Its presence “does not seem to have increased recently” in Europe according to Sibylle Bernard-Stoecklin of the infectious diseases department of the Sainté Publique Française.

Currently, the WHO considers that four variants are of concern:

- Alpha (British), present in 193 countries
- Beta (South African) reported in 141 countries
- Gamma (Brazilian) reported in 91 countries
- Delta (Indian), present in 170 countries.

The A. of this Letter to the Editor refers to have contracted this odd variant, albeit he had two

**How to cite this article:** Martini L. Appreciable antagonism Bistorta, Potentilla and calamine manifests towards bruises in COVID-19  $\mu$  variant. Our Dermatol Online. 2022;13(e):e4.

**Submission:** 20.08.2021; **Acceptance:** 25.11.2021

**DOI:** 10.7241/ourd.2022e.4

heterologous vaccinations made and the last inoculation happened on June 26<sup>th</sup> on last August (exactly 60 days after the second inoculation of the covid vaccine) directly in his University during a series of Summer courses for stranger students coming from Latin America.

Symptoms were the identical ones of SARS-Covid 19, even if fever is not so high and worrying and myalgias were not so severe.

The quaintness and peculiarity of this strange variant was the redundancy of bruises all through the entire body.

All the areal complications (upper and lower apparatus, idest as far as the formers are concerned pharynx and trachea where body temperature is usually 33°C and as far as the latters are regarded bronchus and lungs where body temperature raises to 35°C) have been treated with three antibiotics that could not present any cross reaction (and the A has taken amoxycillin, doxiciclyn and rifampicin alternatively every three hours and tylenol only when body temperature reached 38°C, idest every 7-8 hours), but the most important novelty is that the A has cured the bruises employing a magma that could adhere easily and efficiently onto the skin:

The magma contained: Polygonum bistorta rhizoma pulvis 28; Tormentilla Potentilla rhizoma pulvis 28; Calamine 22; Glycerin Bio 22.

To reduce the symptoms (especially the swingin pyrexia) the A needed 19 days and nights, but 6 days of applications of the aforesaid magma were sufficient to reduce the intensity and gravity of the bruises.

Manifold of new variants show the presence of bruises, according to eminent Researchers [1] who asserted that the polymorphic nature of COVID-19-associated cutaneous manifestations led to propose a classification, which distinguishes the following six main clinical patterns:

- (i) urticarial rash,
- (ii) confluent erythematous/maculopapular/morbilliform rash,
- (iii) papulovesicular exanthem,
- (iv) chilblain-like acral pattern,
- (v) livedo reticularis/racemosa-like pattern,
- (vi) purpuric “vasculitic” pattern.

Now Livedo describes a reticulate pattern of slow blood flow, with consequent desaturation of blood and bluish

- cutaneous discoloration [2]. It has been divided into:
- (i) livedo reticularis, which develops as tight, symmetrical, lace-like, dusky patches forming complete rings surrounding a pale center, generally associated with cold-induced cutaneous vasoconstriction or vascular flow disturbances such as seen in polycythemia and
  - (ii) livedo racemosa, characterized by larger, irregular and asymmetrical rings than seen in livedo reticularis, more frequently associated with focal impairment of blood flow, as it can be seen in Sneddon’s syndrome

In their classification, the livedo reticularis/racemosa-like pattern has been distinguished by the purpuric “vasculitic” pattern because the former likely recognizes a occlusive/microthrombotic vasculopathic etiology, while the latter can be more likely considered the expression of a “true” vasculitic process [3-5]. Instead, the classification by Galván Casas et al. [6] merged these two patterns into the category “livedo/necrosis”.

In a French study on vascular lesions associated with COVID-19, livedo was observed in 1 out of 7 patients. In the large cases series of 716 patients by Freeman et al, livedo reticularis-like lesions, retiform purpura and livedo racemosa-like lesions accounted for 3.5, 2.6 and 0.6% of all cutaneous manifestations, respectively [7]. In the multicentric Italian study, livedo reticularis/racemosa-like lesions accounted for 2.5% of cutaneous manifestations

## Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

## REFERENCES

1. Genovese G, Moltrasio C, berti E, Marzano AV. Skin manifestations associated with COVID-19: current knowledge and future perspectives. *Dermatology*. 2021;237:1–12.
2. Griffiths C, Barker J, Bleiker T, Chalmers R, Creamer D. *Rook’s textbook of dermatology*. 9<sup>th</sup> ed, rev. Hoboken: Wiley-Blackwell; 2016.
3. Marzano AV, Cassano N, Genovese G, Moltrasio C, Vena GA. Cutaneous manifestations in patients with COVID-19: a preliminary

- review of an emerging issue. *Br J Dermatol.* 2020;183:431–42.
4. Yaneva M, Demerdjieva Z, Darlenski R, Tsankov N. COVID-19 and skin: Analysis of the available data. *Our Dermatol Online.* 2020;11(Supp. 2):6-9.
  5. Sigha OB, Kouotou EA. [COVID-19 infection revealed by a flare-up of psoriasis in an elderly Cameroonian: about a case]. *Our Dermatol Online.* 2021;12(Supp. 1):16-20.
  6. Galván Casas C, Català A, Carretero Hernández G, Rodríguez-Jiménez P, Fernández-Nieto D, Rodríguez-Villa Lario A, et al. Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. *Br J Dermatol* 2020;183:71–7.
  7. Bouaziz JD, Duong TA, Jachiet M, Velter C, Lestang P, Cassius C, et al. Vascular skin symptoms in COVID-19: a French observational study. *J Eur Acad Dermatol Venereol.* 2020;34:e451-2.

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**Source of Support:** Nil, **Conflict of Interest:** None declared.