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CASE PRESENTATION

Work Education as a escenario for the identification of oral manifestations associated with Chikungunya. Case series

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ABSTRACT

Introduction: the training of stomatologists in Cuba focuses on graduating comprehensive professionals, where Work Education constitutes a guiding principle of Medical Education that guarantees the development of professional skills in the identification of oral manifestations associated with diseases such as Chikungunya**.**
Case presentation: 3 cases were presented treated in the stomatological consultation during Work Education of the third year of the Stomatology degree at the "Abel Santamaría Cuadrado" General Teaching Hospital, in the period of November-December 2025, where inflammation in the buccal, lingual and gingival mucosa, pain when chewing and aphthous lesions were identified as the main oral manifestations.
Conclusions: work Education proved to be a key scenario for the formation of professional skills in the student, when facing real health problems and oral manifestations associated with emerging diseases such as Chikungunya.

Keywords: Medical Education; Chikungunya Virus; Oral Manifestations.

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INTRODUCTION

The training of stomatologists in Cuba focuses on graduating comprehensive professionals, capable of responding to the population's health needs with a biopsychosocial approach, guaranteeing the development of skills that allow correct diagnosis of pathologies that may arise in their professional practice, with high ethical, moral, human, and patriotic values.[1,2]

In this context, the teaching organization form: Work Education constitutes a fundamental element and guiding principle of Medical Education, as it not only facilitates the acquisition of theoretical and practical skills, but also shapes the modes of action of the future graduate by inserting them into their own work environment from undergraduate studies, developing clinical reasoning, reflection, criticism, and autonomy during patient care, where the stomatological consultation as a variant of Work Education in the stomatology degree constitutes a relevant pillar in the development of clinical and communicative skills.[2,3]

Skills, based on Leontiev's Activity Theory (1981) and Vygotsky's Cultural-Historical Approach (1983), are defined as psychological structures that develop and are expressed in activity, whose structure is necessary for the formation of professional skills, since these, when oriented by motivation and need, allow the student to identify with the profession, applying the clinical method logic, described by Ilizástegui Dupuy (2000) and Selma-Housen (2002), through clinical tools such as interrogation and physical examination, supported by complementary tests.[4]

Professional skills constitute the actions that guide students toward the transformation of the object of their profession, so that in the case of Stomatology students, from the third year of the degree they must develop skills regarding comprehensive stomatological care for the population, using clinical, epidemiological and social methods with correct and effective communication.[5]

The authors of the present study explain that during stomatological consultations students identify, diagnose, and treat common diseases in the stomatological area, but oral manifestations of systemic and emerging diseases that currently affect society and therefore constitute a health problem are also reasons for consultation; among which we find those originating from Chikungunya fever.

Chikungunya is a pathology that causes a viral infection by an RNA alphavirus of the Togaviridae family, transmitted by the Aedes aegypti and Aedes albopictus mosquitoes, endemic to Africa and Asia, which has currently spread to Europe and the Americas.[6]

The risk of Chikungunya spread in the Americas according to Gutiérrez Saravia is greater due to the vectors present in this area and the lack of population immunity against them. In 2013, the first case of autochthonous transmission in the Americas was documented on the island of Saint Martin. By 2014 it expanded to Puerto Rico, Dominican Republic, French Guiana, with inevitable expansion toward the South, North, and rest of Central America.[7]

The epidemiological situation of Chikungunya in Cuba, Mancebo Raymond describes as concerning, with a cumulative incidence of 18,343 cases per 100,000 inhabitants as of November 24, 2025. The virus has been registered in 14 of the 15 provinces, with Havana, Matanzas, and Cienfuegos being the most affected.[8]

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Its symptoms resemble other viruses such as dengue and Zika, so its diagnosis may be erroneous on some occasions.[7]

Among its main clinical manifestations we find high fever, intense joint pain and inflammation in wrists, feet, knees, elbows, and spine, which is associated with its name in the Makonde language: "man who walks bent over". Other signs and symptoms may include headache, myalgia, nausea, vomiting, polyarthritis, rash, and conjunctivitis.[6,7]

METHODS

A study was conducted using the clinical method with a structural systemic approach, where the results of the examination of three patients treated in stomatological consultation during Work Education of the third year of the Stomatology degree at the "Abel Santamaría Cuadrado" General Teaching Hospital in the period of November-December 2025 are presented.

Ethics

The modesty and identity of the patients were respected, selecting only the affected regions to show for purely scientific purposes.

CASE PRESENTATION

Case 1. Female patient, 10 years old, with no personal pathological history, presents to stomatological consultation reporting pain when chewing and in the gums. On oral examination, skin and mucosa of the lower lip with painful aphthous lesions on palpation with whitish center delimited by an erythematous halo are evidenced, in addition to hypercolored gums at marginal and papillary level, increased in volume with accumulation of dentobacterial plaque in the lower sector. (fig. 1)

Fig. 1, Case 1. Female patient, 10 years old.

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Case 2. Male patient, 21 years old, with no personal history, presents to consultation for pain in the lingual mucosa that makes chewing difficult. On oral examination, desquamation of the lip skin and lingual mucosa increased in volume with indentations as a result are evidenced, in addition to non-detachable whitish borders upon scraping, depapillated and hypercolored areas sensitive to palpation. (fig. 2)

Fig. 2, Case 2. Male patient, 21 years old.

Case 3. Female patient, 68 years old, with history of arterial hypertension, reports pain in the labial and buccal mucosa. On oral examination, multiple aphthous lesions are visualized in the mucosa of the upper lip, painful on palpation, with loss of epithelial continuity of crateriform appearance, with whitish-yellowish center and well-circumscribed erythematous borders. (fig. 3)

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Fig. 3, Case 3. Female patient, 68 years old.

RESULTS

Inflammation in buccal, lingual and gingival mucosa, pain when chewing, and aphthous lesions were identified as the main oral manifestations in these patients.

DISCUSSION

The most frequent oral manifestations in the treated patients were aphthous lesions, inflammation both at gingival level and in the mucosa of lip and tongue, and pain during chewing, results that coincide with the criteria of other researchers such as Mancebo Raymond and cols,[8] who state that oral manifestations can be located in the lips, tongue, floor of the mouth, palate, gums, and buccal mucosa, with presence of ulcers, erythemas, and even burning in the mucosa and difficulty opening the mouth, with ulcers (48 %) being the most frequent oral manifestation in their research.[8]

In the case of González Galván and col,[9] they also describe in their study that 43,5 % manifested gum pain followed by burning sensation in the mouth (41,9 %), and presence of ulcers (31,2 %), these being the most frequent oral manifestations. The researchers add that hypersalivation and tooth mobility may also be considered, which were the least frequent in their research with 14,5 % and 9,1 % respectively, elements that were not present in the cases presented above in the present study. The researchers also report that pain and bleeding of the gums, burning sensation in the mouth, difficulty/pain when opening the mouth, inability to chew and/or swallow, halitosis, ulceration, and loss of taste can be documented, the latter elements that do coincide with the current investigation.

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Likewise, González Acosta and Aira,[10] agree with this study, as they state that among the most frequent oral manifestations are aphthae, gingivitis, halitosis, difficulty chewing, and they add others that may be found such as pain to open the mouth, hypersalivation, loss of taste, TMJ arthralgia, cheilitis, cervical lymphadenopathies, burning and gingival hemorrhage.

CONCLUSIONS

Work Education proved to be a key scenario for the formation of professional skills in the student, when facing real health problems and oral manifestations associated with emerging diseases such as Chikungunya. This experience allowed identifying inflammation in buccal, lingual and gingival mucosa, pain when chewing, and aphthous lesions as the main oral manifestations.

Conflict of Interest

The authors declare that there is no conflict of interest.

Author Contribution

MMH, MHV: Conception and design of the article. Manuscript writing. Review of the final version of the article.
LHF, DFM, YHA: Conception and design of the article. Critical review of the manuscript.

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