https://doi.org/10.36377/ET-0087

Interdisciplinary approach to diagnosis and treatment of a patient with lesions of the oral mucosa (Clinical case)

Elena A. Temnikova, Anna V. Chekina ✉, Kira V. Vetkova
Omsk State Medical University, Omsk, Russian Federation
✉ annacheckina@yandex.ru

Abstract
INTRODUCTION. The management of patients with oral mucosal diseases (OMD) remains a considerable challenge for dental practitioners due to the complexity of diagnosis in everyday clinical practice. According to epidemiological studies, the prevalence of OMD varies widely across countries and populations, ranging from 4.9% to 64.7%, and is influenced by factors such as age and general health status. These pathological conditions significantly reduce patients' quality of life. Given the complexity of systemic therapy regimens, dentists often encounter difficulties in diagnosing and comprehensively assessing the patient's overall somatic condition without adequate support from medical specialists. Moreover, oral mucosal lesions may be associated with mucosal and skin lesions of other organs. Therefore, the treatment of OMD requires a multidisciplinary approach. However, general practitioners frequently lack clear guidelines on what exactly to look for and which diagnostic methods to employ.
AIM. To investigate the impact of interdisciplinary collaboration between dentists and medical specialists on the effectiveness of diagnosing and managing oral mucosal diseases.
MATERIALS AND METHODS. To evaluate the effectiveness of a multidisciplinary approach in the management of patients with OMD, a survey was conducted among 60 physicians (30 general practitioners and 30 dentists). The questionnaire included items related to the reasons for patient referrals, perceived benefits of consultations, and the necessity of laboratory diagnostics. The data were analyzed to identify discrepancies in perspectives between the two professional groups.
CONCLUSIONS. The primary role of the general practitioner in the management of patients with OMD referred by dentists is to assess potential somatic manifestations of autoimmune diseases (e.g., lichen planus), as well as to evaluate the influence of ongoing pharmacotherapy on the progression of mucosal pathology. A critical component also involves determining the indications and regimens for systemic treatment, taking into account comorbid conditions and minimizing the risk of adverse effects.

Keywords: oral mucosa, oral lichen planus, skin, interdisciplinary approach, treatment

Article info: received – 27.02.2025; revised – 08.04.2025; accepted – 29.04.2025

Conflict of interest: The authors report no conflict of interest.

Acknowledgements: There are no funding and individual acknowledgments to declare.

For citation: Temnikova E.A., Chekina A.V., Vetkova K.V. Interdisciplinary approach to diagnosis and treatment of a patient with lesions of the oral mucosa (Clinical case). *Endodontics Today.* 2025;23(2):271–275. https://doi.org/10.36377/ET-0087

Междисциплинарный подход к диагностике и лечению пациента с поражением слизистой оболочки полости рта (клинический случай)

Е.А. Темникова, А.В. Чекина ✉, К.В. Веткова
Омский государственный медицинский университет, г. Омск, Российская Федерация
✉ annacheckina@yandex.ru

Резюме
ВВЕДЕНИЕ. Ведение пациентов с заболевания слизистой оболочки рта (СОР) остается для стоматологов трудной задачей из-за сложной диагностики в повседневной практике. Распространенность поражений СОР, по данным эпидемиологических исследований, в разных странах и популяциях составляет от 4,9% до 64,7% и зависит от возраста, общего состояния здоровья. Данные патологические состояния значимо снижают качество жизни пациентов. Учитывая сложные схемы системной терапии, стоматологи испытывают затруднения в диагностики и общей оценки соматического состояния без адекватной помощи врачей других специальностей. Кроме того, поражения полости рта могут сочетаться с поражением слизистой других органов и кожи. Поэтому, лечение патологии СОР требует междисциплинарного подхода. В то же время у врачей терапевтов нет четкого представления о том, что именно нужно искать и какие методики использовать.

ЦЕЛЬ ИССЛЕДОВАНИЯ. Изучить влияние междисциплинарного взаимодействия стоматолога с врачами смежных специальностей на эффективность диагностики и лечения заболеваний слизистой оболочки полости рта.
МАТЕРИАЛЫ И МЕТОДЫ. Для оценки эффективности междисциплинарного подхода в ведении пациентов с заболеваниями слизистой оболочки полости рта было проведено анкетирование 60 врачей (30 терапевтов и 30 стоматологов). Анкета включала вопросы о причинах направления пациентов, оценке пользы консультаций, а также необходимости лабораторной диагностики. Данные были проанализированы с целью выявления расхождений во взглядах врачей различных специальностей.
ВЫВОДЫ. Основной задачей терапевта при ведении пациентов с заболеваниями слизистой оболочки полости рта, направленных стоматологами, является клиническая оценка возможных соматических проявлений аутоиммунных заболеваний (например, при красном плоском лишае), а также анализ влияния текущей медикаментозной терапии на течение патологии слизистой. Важным этапом является определение показаний и схемы системного лечения с учетом сопутствующих заболеваний и минимизации риска побочных эффектов.

Ключевые слова: слизистая полости рта, красный плоский лишай полости рта, кожа, лечение

Информация о статье: поступила – 27.02.2025; исправлена – 08.04.2025; принята – 29.04.2025

Конфликт интересов: авторы сообщают об отсутствии конфликта интересов.

Благодарности: финансирование и индивидуальные благодарности для декларирования отсутствуют.

Для цитирования: Темникова Е.А., Чекина А.В., Веткова К.В. Междисциплинарный подход к диагностике и лечению пациента с поражением слизистой оболочки полости рта (клинический случай). *Эндодонтия Today*. 2025;23(2):271–275. https://doi.org/10.36377/ET-0087

INTRODUCTION

Oral mucosal diseases (OMD) represent a common and clinically significant problem that requires a multidisciplinary and systematic approach to both patient evaluation and treatment planning [1–3]. Epidemiological data indicate that these conditions not only impair patients' health-related quality of life [4], but may also pose a substantial risk of malignant transformation, with reported rates ranging from 1% to 17% across nearly 90% of OMD nosological types [5; 6]. For dental practitioners, managing patients with OMD remains a challenging task in routine clinical settings due to the complex nature of these disorders. At the diagnostic stage, dentists must consider a broad differential diagnosis, including both primary mucosal lesions and secondary changes associated with systemic diseases. Additionally, external and internal factors such as pharmacological therapies may further complicate the clinical picture. Consequently, referrals to general practitioners for further diagnostic work-up and systemic management are common. However, our survey findings demonstrate that general practitioners frequently lack clear guidance on what clinical signs to investigate and which diagnostic strategies to employ when assessing patients referred by dentists for OMD-related concerns.

AIM

To evaluate the effectiveness of managing patients with oral mucosal diseases using a multidisciplinary approach involving medical specialists from related fields.

MATERIALS AND METHODS

To confirm the effectiveness of treating oral mucosal diseases (OMD) using a multidisciplinary approach, a survey was conducted involving 60 respondents (30 general practitioners and 30 dentists). Half of the general practitioners indicated that the primary reason for referral by dentists was to identify the underlying cause of the mucosal changes. However, according to the majority of dentists (50%), consultations with general practitioners helped to determine the etiology of OMD in fewer than 15% of cases. Notable discrepancies were observed between dentists and general practitioners regarding the necessity of laboratory diagnostics in the assessment of these patients. Dentists were significantly less likely than general practitioners to consider liver function tests (55% vs. 83%), renal function tests (25% vs. 50%), and urinalysis (25% vs. 83%) as essential. General practitioners consulting patients with OMD referred by dentists must recognize that these conditions encompass a broad spectrum of diseases. Nevertheless, in recent years, specific guidelines for the examination and follow-up of certain conditions, such as oral lichen planus, have been established.

CLINICAL CASE

A 68-year-old female patient presented to the Department of Therapeutic Dentistry with complaints of painful sensations affecting the oral mucosa of the cheeks and lips. The pain was aggravated by the consumption of spicy and coarse foods.

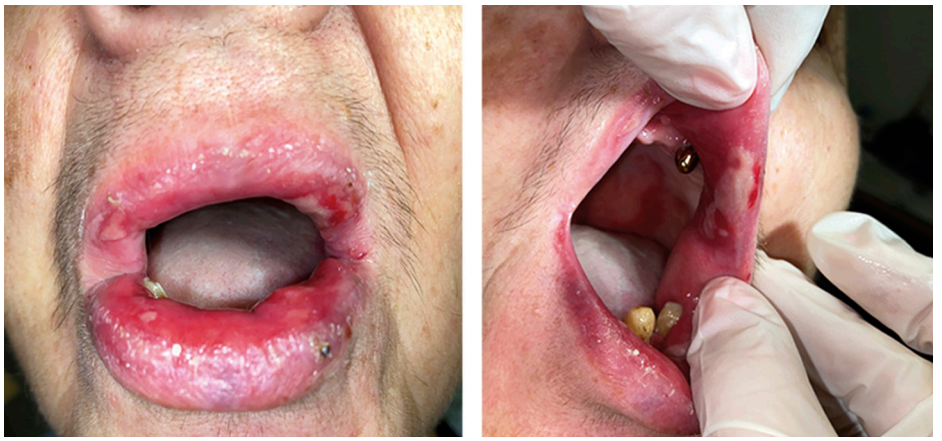
The patient reported that the onset of oral pain occurred three years prior. During this period, she also experienced pathological changes of the laryngeal mucosa, genital mucosa, and skin. Throughout this time, she sought consultations and follow-up care from various specialists (dentist, gynecologist, otolaryngologist, oncologist) at her place of residence, but reported no improvement despite multiple concurrent local treatment regimens prescribed by the individual specialists. The patient had previously been examined by a general practitioner and was under regular follow-up for hypertension, type II diabetes mellitus, and hypothyroidism.

Intraoral examination by the dentist revealed diffuse edema and hyperemia of the oral mucosa of the cheeks and the vermilion border of the lips. Multiple

grayish-white, polygonal papules forming a characteristic Wickham's striae pattern were observed. In the center of the lesions, erosions covered with a fibrinous coating were noted, which were markedly painful upon palpation (Fig. 1, 2). Examination of the skin revealed polygonal, round to oval papules, measuring 1–2 mm in diameter, with a flat surface and sharply demarcated borders. The lesions were bluish-red in color, with residual post-inflammatory pigmentation in regressing areas appearing as yellowish or brownish patches (Fig. 3). Palpation revealed enlargement and tenderness of the submandibular lymph nodes.

Histological examination of the erosion site on the lateral surface of the cheek, performed by an oncologist, revealed hyperkeratosis, parakeratosis, granulomas, and vacuolar degeneration of the basal epithelial layer. Based on these findings, a diagnosis of the erosive-ulcerative form of oral lichen planus (OLP) was suggested, and systemic corticosteroid therapy was recommended. To determine the feasibility of initiating systemic therapy, the patient was referred to a general practitioner for consultation. Following joint consultations with the general practitioner and dermatologist, the patient was hospitalized for systemic treatment. Upon completion of the systemic therapy course, maintenance therapy with low-dose corticosteroids and continued follow-up by a dentist, dermatologist, and general practitioner were advised. At subsequent follow-up visits, the patient demonstrated a stable remission of symptoms (Fig. 4, 5).

Oral lichen planus (OLP) is a chronic autoimmune inflammatory disease characterized by T-cell dysfunction, primarily affecting the skin and mucous membranes, and less commonly the nails and hair. It typically presents with lichenoid papules. OLP occurs in approximately 1–2% of the population, more frequently in middle-aged and elderly women [1; 2]. Approximately 15% of patients also develop cutaneous lesions, and 20% present with genital involvement [3]. Between 27% and 82% of patients with OLP have detectable serum autoantibodies (ANA, SMA, AMA, anti-parietal cell antibodies, thyroglobulin antibodies, and thyroid microsomal autoantibodies) at significantly higher frequencies than healthy control groups. The presence of these autoantibodies in patients with OLP has been shown to correlate directly with disease severity.



A B

Fig. 1. Erosions on the vermilion border of the lips (*A*) and the buccal mucosa (*B*)

Рис. 1. Эрозии на красной кайме губ (*A*) и слизистой щеки (*B*)

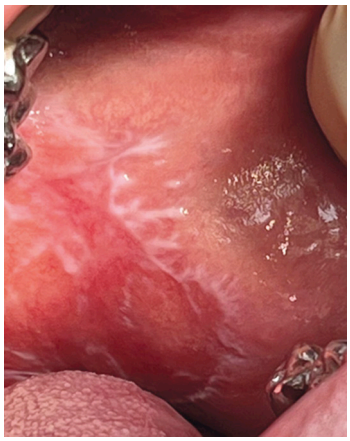
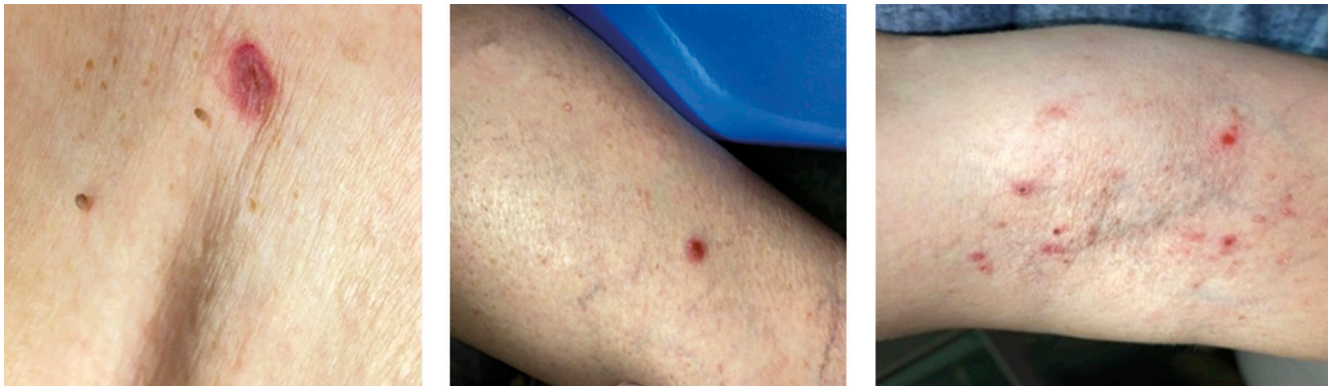


Fig. 2. Erosive-ulcerative form of oral lichen planus (OLP)

Рис. 2. КПЛ эрозивно-язвенная форма



A B C

Fig. 3. Papules on the skin

Рис. 3. Папулы на коже

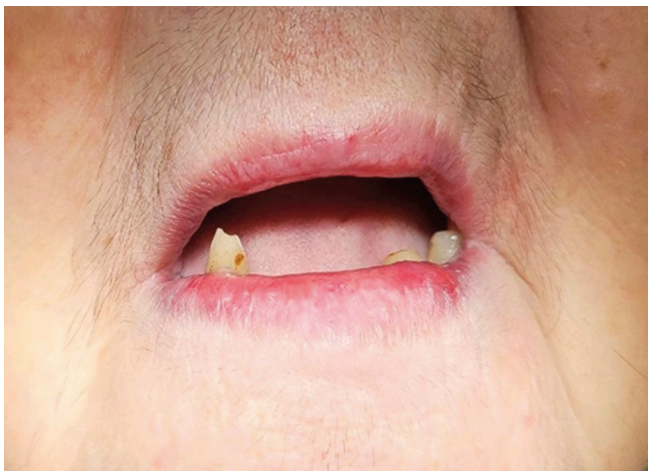


Fig. 4. Lip mucosa (after treatment)
Рис. 4. Слизистая губ (после лечения)

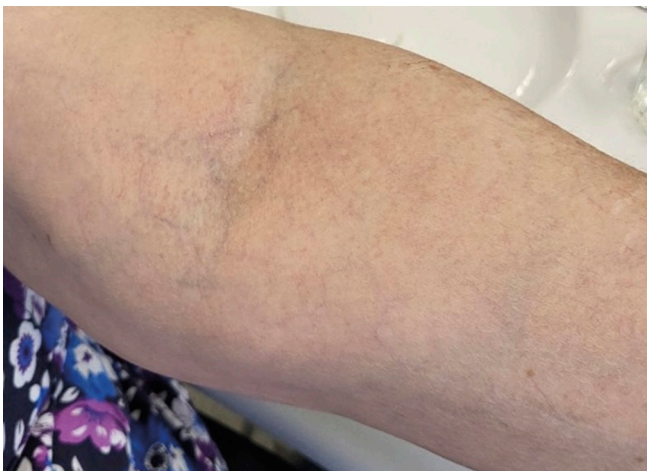


Fig. 5. Skin of the hands (after treatment)
Рис. 5. Кожа рук (после лечения)

OLP is frequently associated with gastrointestinal disorders, cardiovascular diseases, and endocrinopathies [4; 6]. The sequence of pathological changes is currently considered to be driven primarily by the autoimmune process originating in the skin and mucous membranes. Specifically, OLP triggers the production of autoantibodies, which subsequently lead to secondary involvement of the stomach, thyroid gland, and other organs [5]. Autoimmune gastritis, in combination with dietary restrictions caused by painful oral lesions, may result in deficiencies of vitamin B12, iron, and folic acid, along with decreased levels of vitamins B1 and B6, and is often accompanied by elevated plasma homocysteine concentrations.

In patients with cardiovascular diseases, the chronic systemic inflammation associated with autoimmune processes in OLP contributes to worsening dyslipidemia, progression of atherosclerosis, exacerbation of metabolic syndrome, and the development of insulin resistance [2; 6]. Consequently, some authors propose that the severity of oral lichen planus should be viewed as an integrative marker reflecting oxidative stress, microcirculatory disturbances in the oral mucosa, alterations in blood fatty acid profiles, changes in the oral and intestinal microbiota, and the clinical course of the disease [5; 7].

Considering the diverse pathological manifestations of OLP, a diagnostic and treatment algorithm has been proposed that includes consultations with multiple specialists at different stages of patient management. These include dermatologists for the diagnosis and treatment of skin, nail, genital, and scalp lesions; otolaryngologists for laryngeal involvement; ophthalmologists for conjunctival lesions; gynecologists for vulvar and vaginal lesions; and gastroenterologists for esophageal involvement in cases of dysphagia or odynophagia. In patients with anxiety, referral to a psychotherapist may also be recommended to improve treatment adherence and quality of life [7].

Contrary to common assumptions, the role of the general practitioner in managing patients with oral lichen planus (OLP) is not to identify the underlying cause of the disease, but rather to assess the overall health status of the patient and adjust the management of comorbid conditions. Medications commonly prescribed in internal medicine may, according to the literature, exacerbate OLP manifestations or induce clinically similar lichenoid drug reactions. These include non-steroidal anti-inflammatory drugs, certain hypoglycemic agents, oral and retroviral medications, β-blockers, thiazide diuretics, penicillamine, rituximab, angiotensin-converting enzyme inhibitors, and other pharmacological agents [7].

Current therapeutic strategies for OLP recommend, in addition to local dental treatment, long-term systemic corticosteroid therapy (e.g., prednisolone 30 mg for 1–2 months), which necessitates careful monitoring by the general practitioner for potential adverse effects. These include adrenal suppression, new-onset or worsening hypertension, hyperglycemia, dyslipidemia, weight gain, gastrointestinal disturbances, and osteoporosis [2; 5].

CONCLUSION

Thus, the primary role of the general practitioner in the management of patients with oral mucosal diseases referred by dentists is not to identify the etiology of the condition, but to conduct a thorough clinical assessment of potential systemic manifestations of autoimmune disorders, such as hepatic, thyroid, or gastrointestinal involvement commonly seen in oral lichen planus. Additionally, it is essential to evaluate ongoing pharmacological treatments for comorbid conditions in order to identify and mitigate any potential adverse effects that may exacerbate oral mucosal pathology. Finally, a comprehensive assessment of the patient's overall health status is critical for determining the appropriate systemic corticosteroid therapy regimen and minimizing the risk of associated complications.

REFERENCES / СПИСОК ЛИТЕРАТУРЫ

1. Gorodilova E.A., Gileva O.S., Koshkin S.V., Halyavina I.N. Interdisciplinary approaches to comprehensive treatment of patients with generalized lichen planus of derma and oral mucosa: the role of prosthetic treatment. *Medical Newsletter of Vyatka*. 2016;(4):20–25. (In Russ)
   Городилова Е.А., Гилева О.С., Кошкин С.В., Халявина И.Н. Междисциплинарные подходы к комплексному лечению больных с распространенным красным плоским лишаем кожи и слизистой оболочки рта: роль протетического лечения. *Вятский медицинский вестник*. 2016;(4):20–25.
2. Tlish M.M., Osmolovskaya P.S. Lichen planus ruber, current therapy: a systematic review. *Kuban Scientific Medical Bulletin*. 2021;28(2):104–119. (In Russ.) https://doi.org/10.25207/1608-6228-2021-28-2-104-119
   Тлиш М.М., Осмоловская П.С. Красный плоский лишай. Современные методы терапии: систематический обзор. *Кубанский научный медицинский вестник*. 2021;28(2):104–119. https://doi.org/10.25207/1608-6228-2021-28-2-104-119
3. Surdina E.D., Silin A.V., Rodionov G.G. Criteria for assessing severity of oral lichen planus. *Medical Alliance*. 2021;9(1):73–81. (In Russ) https://doi.org/10.36422/23076348-2021-9-1-73-81
   Сурдина Э.Д., Силин А.В., Родионов Г.Г. Критерии оценки тяжести течения красного плоского лишая слизистой оболочки рта. *Медицинский альянс*. 2021;9(1):73–81. https://doi.org/10.36422/23076348-2021-9-1-73-81
4. Surdina E.D., Rodionov G.G., Silin A.V., Plavinskij S.L., Kaspina A.I., Bolotova M.E., Voroshilova T.M. Evaluation of the oral, colon and small intestine microbiota in patients with oral lichen planus. *Parodontologiya*. 2017;22(2):47–52. (In Russ.) Режим доступа: https://www.parodont.ru/jour/article/view/145 (дата обращения: 20.03.2025).
   Сурдина Э.Д., Родионов Г.Г., Силин А.В., Плавинский С.Л., Каспина А.И., Болотова М.Е., Ворошилова Т.М. Оценка микробиоты полости рта, тонкой и толстой кишки у больных красным плоским лишаем слизистой оболочки рта. *Пародонтология*. 2017;22(2):47–52. Available at: https://www.parodont.ru/jour/article/view/145 (accessed: 20.03.2025).
5. Boch K., Langan E.A., Kridin K., Zillikens D., Ludwig R.J., Bieber K. Lichen Planus. *Front Med*. 2021;8:737813. https://doi.org/10.3389/fmed.2021.737813
6. Gorouhi F., Davari P., Fazel N. Cutaneous and mucosal lichen planus: a comprehensive review of clinical subtypes, risk factors, diagnosis, and prognosis. *Scientific World Journal*. 2014;2014:742826. https://doi.org/10.1155/2014/742826
7. Chiang C.P., Yu-Fong Chang J., Wang Y.P., Wu Y.H., Lu S.Y., Sun A. Oral lichen planus – Differential diagnoses, serum autoantibodies, hematinic deficiencies, and management. *J Formos Med Assoc*. 2018;117(9):756–765. https://doi.org/10.1016/j.jfma.2018.01.021

INFORMATION ABOUT THE AUTHORS

Elena A. Temnikova – Dr. Sci. (Med.), Associate Professor, Professor of the Department of Therapeutic Dentistry, Omsk State Medical University, 12 Lenin Str., Omsk 644099, Russian Federation; https://orcid.org/0000-0003-2355-4906

Anna V. Chekina – Cand. Sci. (Med.), Associate Professor of the Department of Therapeutic Dentistry, Omsk State Medical University, 12 Lenin Str., Omsk 644099, Russian Federation; https://orcid.org/0000-0002-2569-4964

Kira V. Vetkova – Cand. Sci. (Med.), Associate Professor of the Department of Therapeutic Dentistry, Omsk State Medical University, 12 Lenin Str., Omsk 644099, Russian Federation; https://orcid.org/0000-0002-7611-4878

ИНФОРМАЦИЯ ОБ АВТОРАХ

Темникова Елена Андреевна – д.м.н., доцент, профессор кафедры поликлинической терапии и внутренних болезней, ФГБОУ ВО «Омский государственный медицинский университет», 644099, Российская Федерация, г. Омск, ул. Ленина, д. 12; https://orcid.org/0000-0003-2355-4906

Чекина Анна Витальевна – к.м.н., доцент, доцент кафедры терапевтической стоматологии, ФГБОУ ВО «Омский государственный медицинский университет», 644099, Российская Федерация, г. Омск, ул. Ленина, д. 12; https://orcid.org/0000-0002-2569-4964

Веткова Кира Вениаминовна – к.м.н., доцент, доцент кафедры терапевтической стоматологии, ФГБОУ ВО «Омский государственный медицинский университет», 644099, Российская Федерация, г. Омск, ул. Ленина, д. 12; https://orcid.org/0000-0002-7611-4878

AUTHOR'S CONTRIBUTION

All the authors made equal contributions to the publication preparation in terms of the idea and design of the article; data collection; critical revision of the article in terms of significant intellectual content and final approval of the version of the article for publication.

ВКЛАД АВТОРОВ

Все авторы внесли равноценный вклад в подготовку публикации в части замысла и дизайна исследования; сбора данных; критического пересмотра статьи в части значимого интеллектуального содержания и окончательного одобрения варианта статьи для опубликования.