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**INDIVIDUAL PREVENTION AND TREATMENT OF THE INITIAL STAGES OF
INFLAMMATORY DISEASES OF THE PARODONT IN THE FRAMEWORK OF
DISPANSER CONTROL**

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Abstract: An analysis of the results of a dental examination in Andijan region (2022–2024) showed a high prevalence of signs of periodontal tissue damage. In these conditions, emphasis is needed on the active introduction of prevention at the individual level and the establishment of new forms of organization of specialized periodontic care.

Key words: periodontal disease, clinical observation.

**ДИСПАНСЕР НАЗОРАТИ ДОИРАСИДА ПАРОДОНТ ЯЛЛИҒЛАНИШ
КАСАЛЛИКЛАРИНИНГ ДАСТЛАБКИ БОСҚИЧЛАРИНИ ИНДИВИДУАЛ
ОЛДИНИ ОЛИШ ВА ДАВОЛАШ**

Аннотация: Андижон вилоятида стоматологик текширув натижаларининг таҳлили (2022-2024 йй.) пародонт тўқималарининг шикастланиш белгиларининг юкори тарқалганлигини кўрсатди. Бундай шароитда индивидуал даражадаги профилактикани фаол жорий этиш ва ихтисослаштирилган пародонтологик ёрдамни ташкил этишнинг янги шакллари шакллантиришга эътибор қаратиш зарур.

Калит сўзлар: периодонтал касаллик, клиник кузатув.

**ИНДИВИДУАЛЬНАЯ ПРОФИЛАКТИКА И ЛЕЧЕНИЕ НАЧАЛЬНЫХ СТАДИЙ
ВОСПАЛИТЕЛЬНЫХ ЗАБОЛЕВАНИЙ ПАРОДОНТА В РАМКАХ
ДИСПАНСЕРНОГО КОНТРОЛЯ**

Аннотация: Анализ результатов стоматологического обследования в Андижанской области (2022-2024 гг.) показал высокую распространенность симптомов поражения тканей пародонта. В этих условиях необходимо сосредоточиться на активном внедрении профилактики на индивидуальном уровне и формировании новых форм организации специализированной пародонтологической помощи.

Ключевые слова: заболевание пародонта, клиническое наблюдение.

INTRODUCTION



A direct correlation has now been established between the use of inadequate approaches to the rehabilitation of periodontal tissues and the number of negative outcomes in dental implantation [4]. Our previous studies, analyzing arbitrarily selected orthopantomograms of individuals with dental implants, showed that in 95% of cases, treatment was performed against the background of stabilized pathological processes in periodontal tissues or healing occurred with residual signs. The results of comprehensive treatment for patients with chronic generalized periodontitis of mild severity were summarized three years after implantation. A total of 227 implants were placed, 34 of which (14.9%) were removed. The effectiveness of implantation is even lower in patients with dental arch defects against the background of chronic generalized periodontitis of moderate severity [2].

The specific features of the morphofunctional structure of peri-implant tissues, such as the absence of collagen fiber bundles, physiological gingival sulcus, gingival fluid, and incomplete trophic function, make them susceptible to adverse local factors [5]. An analysis of recent publications on initial patient screening, the organization of clinical surveillance (CS), treatment, and prevention identified the need to develop new organizational and methodological aspects for identifying, treating, and dynamically monitoring individuals susceptible to periodontal diseases.

Objective Individual prevention and treatment of the initial stages of inflammatory periodontal diseases within the framework of clinical surveillance.

MATERIALS AND METHODS

In our study, we implemented a three-stage principle for the clinical surveillance of individuals at risk of developing inflammatory periodontal diseases (IPD): 1) Clinical Selection (Screening): Identification of patients with factors necessitating inclusion in the clinical surveillance registry. 2) Clinical Registration: Accounting for patients who will be included in the clinical surveillance program. 3) Clinical Monitoring (Surveillance): Implementation of personalized therapeutic and prophylactic measures and dynamic monitoring of their effectiveness.

The specificity of clinical surveillance for the contingent at risk for IPD development, as previously mentioned, is associated with the presence of systemic diseases and the chronic course of IPD, which requires long-term monitoring, correction, and a complex interdisciplinary approach. Thus, for the purpose of individual prevention of periodontal pathology, clinical surveillance is a more advanced form of work for dentists, as it involves identifying periodontopathogenic factors that predict the onset of the pathology, detecting preclinical forms of the disease, and implementing a complex of therapeutic, prophylactic, and socio-hygienic measures that take into account the individual characteristics of the general and dental status of patients in all age groups.

Following a survey and initial diagnosis during the clinical selection process, patients distributed into the following research groups should be registered:

- Patients with intact periodontium (with a genetic predisposition).
- Patients with intact periodontium who have periodontopathogenic and predisposing risk factors in the oral cavity (supragingival and subgingival soft and hard dental deposits, impaired functional load on the periodontium, pathological changes in the organs and tissues of the oral cavity, retention factors, poor oral hygiene, harmful habits, etc.).
- Patients with localized forms of gingivitis and periodontitis.
- Individuals with generalized catarrhal gingivitis and periodontitis.

Taking into account the specific characteristics of the disease and the presence of risk factors, we formed the following clinical surveillance groups:



1. Those requiring active prevention or treatment of IPD.
2. Those receiving secondary prevention or supportive treatment.
3. The rehabilitation group undergoing follow-up examinations.

In order to timely implement targeted personalized therapeutic and prophylactic measures, a diagnostic complex was formulated, which integrally reflected the individual mechanisms of pathological process development in the periodontium and its external clinical manifestations. The isolation of 15 and the most important methods for assessing periodontal status was carried out using a loose a priori ordering method. This list included those that are most illustrative, not complicated to perform, reflect the patient's dental status, and allow for objective monitoring of the periodontal condition (Table 1).

Table 1 List of key methods for prognosis and early diagnosis of inflammatory periodontal diseases

No.	Method Name	Area of Study
1	Examination	Oral cavity
2	Analysis of Anamnesis Data	Body (Systemic)
3	Determination of Gingival Bleeding Degree	Periodontal Soft Tissues
4	Assessment of the Severity of Inflammatory Phenomena in the Gums using the Schiller-Pisarev test, Gingivосcopy	Periodontal Soft Tissues
5	Indication and Quantitative Assessment	Dental plaque, enamel, and cementum
6	Soft and Hard "Dental" Deposits	Alveolar Bone Tissue of the Jaws
7	Assessment of Radiological Examination Data (Computed Tomography)	Periodontal Soft Tissues
8	Determination of the Depth of the Gingival Sulcus or Periodontal Pockets	Tooth Support Apparatus
9	Determination of Tooth Mobility	Periodontal Soft Tissues and Alveolar Process
10	Gingival Palpation	Gums (Interdental Papilla, Marginal, and Alveolar parts)
11	Determination of PMA Index	Periodontium
12	Determination of Periodontal Index	Periodontal Soft Tissues, Dental Plaque, Gingival Fluid
13	Cytological Examination	Periodontal Soft Tissues, Gingival Fluid
14	Assessment of Hard Tooth Tissue Status	Tooth Enamel and Dentin
15	Determination of the pH Value of Oral and/or Gingival Fluid	Oral Fluid

The three-stage system of clinical surveillance for patients with or susceptible to IPD involves assessing periodontal status using the formulated set of diagnostic methods in each group:

- During the initial visit to the dentist;
- During the implementation of treatment and/or prevention measures;



- In dynamic follow-up after the conducted courses of treatment and prevention.

The developed standards for diagnostic examinations and the volume of care at the stages of clinical surveillance, on the one hand, have a unified nature, taking into account the specifics of our region, and are aimed at higher quality execution of therapeutic and prophylactic measures. On the other hand, they provide for an individualized approach with the substantiation of the frequency of observations and examinations by specialists.

At the clinical monitoring stage, patients were prescribed primary, specific secondary prevention, or treatment measures aimed at eliminating or minimizing general and local periodontopathogenic factors, as well as control examinations, as indicated. Prescriptions were made in accordance with the list and sequence of application of the identified diagnostic methods. When disorders of the state of certain organs and systems were identified that had a pathogenetic connection with pathological processes in the periodontium (according to anamnesis and oral cavity examination data), the examined individuals were recommended consultations with specialist physicians, balanced nutrition, and health-improvement measures.

Assessing local factors such as pathology of the oral vestibule architecture, impaired frenulum attachment of the lips and tongue, malocclusion, carious destruction of the occlusal, proximal, and cervical areas, substandard prosthetics and restorations as causes of the onset and progression of inflammation in periodontal tissues, served as the basis for planning measures to eliminate or minimize them. Such patients were referred to the appropriate specialists for orthodontic and orthopedic treatment, and oral sanitation by general dentists and surgeons.

One of the key aspects of treating and preventing periodontal pathology was professional oral hygiene. Therefore, in patients at risk of developing IPD, supragingival and subgingival dental deposits were removed, they were trained in rational oral hygiene, and in cases of unsatisfactory oral condition, therapeutic and prophylactic toothpastes were recommended, which prevent the formation and calcification of dental plaque due to enzyme-containing components.

A complex personalized approach was applied to individuals with localized forms of gingivitis and periodontitis, taking into account both the etiological factors and the local dental status in the affected area. To eliminate the local inflammatory process, antiseptic treatment was performed, and periodontal tissues were isolated from damaging factors. Eliminating filling defects, complete restoration of interdental contact points, and performing modern orthopedic treatment helped create conditions for subsequent regeneration of periodontal structures.

In the presence of pronounced symptoms of IPD pathology, we recommended specific medications to patients that included herbal and natural components, provided a complex effect on various links of the periodontal disease pathogenesis, and were adapted to the specific clinical situation. Control over the execution of all individualized therapeutic and prophylactic measures (TPM) was carried out during periodic examinations, and recommendations were corrected as needed.

We recommend assessing the effectiveness of clinical surveillance by the following qualitative and quantitative indicators of this stage:

- The planned nature and activity of clinical monitoring (the ratio of the number of patient visits to the total number of scheduled visits) – 85.4%;
- Full execution of planned personalized therapeutic and prophylactic measures (the ratio of the number of executed personalized TPMs to the total number planned) – 86.6%, which characterizes the high quality of clinical surveillance.



The overall effectiveness index of individual prevention of IPD, which is determined after at least 2 years of clinical monitoring following the completion of primary, secondary, and tertiary intervention, amounted to 100%.

CONCLUSIONS

The implementation of personalized measures within the framework of clinical surveillance is more effective than the independent execution of traditional instructions recommended by dentists.

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