

PREVENTIVE MEDICINE: THE CURRENT STATE AND PROSPECTS

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PERIODONTAL PATHOLOGIES IN THE SECOND TRIMESTER OF PREGNANCY. DETERMINATION USING SCREENING TEST

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Actuality: The amount of pregnant women having periodontal diseases is approximately 40% [1, p. 118]. Usually, such oral diseases as caries, gingivitis, and periodontitis have a great potential to impact on pregnancy outcome. These diseases are interrelated, with progression from supragingival plaques to subgingival infections and periodontal disease [2, p. 447]. Gram-negative anaerobic microorganisms play a leading role in the development of periodontal disease. In patients with untreated periodontal disease, brushing teeth, daily chewing or dental manipulations can cause bacteremia [3, p. 509]. Toxins of subgingival microbial biofilms and proinflammatory cytokines of the diseased periodontium reach the blood-placental barrier [4, p. 342]. Chemical mediators of inflammation play an important role in the pathogenesis of preeclampsia, intrauterine growth retardation and premature birth [5, p. 1430]. Since that time, three addi-

tional meta-analyses have been published; all suggesting that treatment of periodontal disease does not lead to a reduction in preterm birth [6, p. 156]. The first large randomized investigation was performed by Michalowicz and colleagues. They determined the impact of treatment of periodontal disease on preterm birth. They also illustrated improvement of periodontal disease and noticed no reduction in these outcomes despite demonstrating successful treatment in periodontal diseases [7, p. 1887].

All the information said above and hundreds of investigations made all over the world submit the actuality of the topic.

Objective: Detection of periodontal diseases in women without pathology of pregnancy and concomitant pathology in the second trimester using periodontal screening index (PSR); ranking of pregnant women by periodontal status with the subsequent appointment and implementation of individual measures for the prevention and treatment of periodontal pathology.

Materials and methods: A survey of 54 pregnant women aged 19-28 years in the second trimester of pregnancy was conducted. We used the PSR [7, pp. 714–720] screening test, a quick and effective method of determining the condition of periodontal tissues, which allows any dentist (not just a periodontist) to interpret the data and recommend appropriate treatment if necessary. The results of the maximum deepening of the periodontal probe, which were entered in the card of the periodontal patient, were recorded. Determination of the amount of necessary dental care was carried out according to the following criteria: index 0 – primary prevention; index 1 – professional oral hygiene, training in individual hygiene; index 2 – professional oral hygiene, elimination of local irritants; index 3 – scaling and smoothing of the root surfaces of the affected areas, with the involvement of related specialists if necessary; index 4 – more detailed diagnostics, complex periodontal treatment and involvement of related specialists are needed.

Results: The results of the survey were distributed as follows: index 0 in 1 patient (2%), index 1 in 30 patients (55.5%), index 2 in 20 patients (37%), index 3 in 3 subjects (5.5%). 98% of pregnant women needed professional dental care. 55% of those surveyed need to implement or correct an individual program for the prevention of periodontal disease. 42% of the subjects need a comprehensive approach to the correction of the periodontal condition with the involvement of a periodontist.

Conclusions: The results of the study emphasize the urgency of the problem of periodontal disease in pregnant women. PSR is an easy-to-use

and effective method of rapid detection of periodontal problems in pregnant women with their subsequent distribution by periodontal status in order to assign the necessary individual amount of dental care.

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