COLLECTION OF ABSTRACTS OF IV INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE OF STUDENTS AND YOUNG SCIENTISTS «SCIENCE AND MEDICINE: A MODERN VIEW OF YOUTH»
Almaty, 20-21 April, 2017
ПРОГРАММА
ПРОГРАММА IV МЕЖДУНАРОДНОЙ НАУЧНО-ПРАКТИЧЕСКОЙ КОНФЕРЕНЦИИ СТУДЕНТОВ И МОЛОДЫХ УЧЕНЫХ «НАУКА И МЕДИЦИНА: СОВРЕМЕННЫЙ ВЗГЛЯД МОЛОДЕЖИ»
Алматы, 20-21 апреля 2017 года

PROGRAMME OF
IV INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE OF STUDENTS AND YOUNG SCIENTISTS «SCIENCE AND MEDICINE: A MODERN VIEW OF YOUTH»
Almaty, 20-21 April, 2017
THE EFFECT OF PHOTOTHERAPY ON PERIODONTAL TISSUE IN PATIENT WITH FIXED ORTHODONTIC TECHNIQUE

Ogurtsov A.S.
Kharkiv National Medical University
Kharkiv, Ukraine

R.S. Nazaryan, professor, doctor of medical science
Department of Pediatric Dentistry, Pediatric Maxillofacial Surgery and Implantology

Treatment of dentoalveolar anomalies with fixed orthodontic technique (FOT) is long and may be accompanied by a negative influence on the teeth and periodontal tissue. The search for effective methods of prevention and treatment of complications is actualy[2,3]. The using of physiotherapy methods contributes to easier and faster orthodontic treatment[1]. Purpose of study is to determine the effect of phototherapy on periodontal tissue in patient with FOT. Materials and methods. The study was conducted in 20 patients with FOT which were divided into 2 groups. The first group (n = 10) - patients who received a course of phototherapy from the first day of treatment of FOT. The second group (n=10) – patients with FOT which the course of phototherapy was not conducted. To assess the condition of periodontal tissues the papillary-marginal-alveolar index (PMA) was used.

Results. Average values of PMA indices before the start of treatment and on the 1st day of fixation of FOT corresponded to mild degree of gingivitis. On the 10th day of fixation of FOT, patients of the 2nd group had moderate gingivitis and patients of the 1st group - mild. On the 14th day and a month after fixation of FOT in the patients of the 1st group, the average values of PMA indices corresponded to easy gingivitis and in patients of the 2nd – medium. Moreover, the average values of PMA indices in the 2nd group a month after fixation of FOT was on 0.07 and 0.16 more than on the 10th and 14th days, respectively.

Conclusion: As a result of the study, the effectiveness of phototherapy in patients with FOT to prevent the development of complications in periodontal tissues has been established. We plan to continue the study and observe the patients to the end of orthodontic treatment to obtain long-term results.

LIST OF REFERENCE:
1. Гуляр С.А., Косаковский А.Л. 2011. Применение БИОПТРОН-ПАЙЛЕР-света в медицине. ИФБ НАН Украины НМАПО МЗ Украины. Киев, 98с.