



ACADEMICA
**An International
Multidisciplinary
Research Journal**
(Double Blind Refereed & Peer Reviewed Journal)



DOI: 10.5958/2249-7137.2021.00905.8

EFFICIENCY OF PDT IN SEVERE CERVICAL DYSPLASIA

Akhmatova Gulrukh Rakhmatovna*

*Bukhara State Medical Institute,
UZBEKISTAN

ABSTRACT

One of the most promising and high-tech methods of treating severe dysplasia and cervical cancer today is photodynamic therapy (PDT), based on the principle of selective destruction of pathologically altered cells. This is achieved due to the effect of photo-radiation on cells, in which a special chemical substance accumulates. The essence of the method lies in the application or introduction of a certain chemical compound into the affected area and further exposure, for example, with a laser. Selectivity or selectivity is a necessary property of all drugs and substances, methods of exposure used to treat cancer and precancer. Selectivity assumes that the introduced substance or effect aimed at destroying cancer cells will not act on healthy tissues, otherwise all destructive methods of treatment will be harmful or fatal to the whole organism. Cervical cancer has the same signs of living tissue, therefore, the main difficulty in creating a selective effect is to study the properties and differences of malignant structures from normal ones. Initially, PDT in gynecology was used to treat early forms of malignant neoplasms, or was used in the complex treatment of severe widespread processes. At present, the technique, due to the achievement of high selectivity, can be prescribed for the treatment of background and precancerous diseases of the cervix, including severe dysplasias. To date, the experience of treating women with cervical pathology using the method of photodynamic therapy shows its high therapeutic activity, a minimum number of complications and side effects.

KEYWORDS: *PDT, Dysplasia, Cancer, Cervix, Precancer.*

REFERENCES

1. S.K Chang, M. Yu. Daud, G. Sterkel, W. Utzinger, E. N. Atkinson, R. R. Richards-Kortum and M. Follen, "Fluorescence Spectroscopy for the Detection of Cervical Precancer: Yes Are there differences during the menstrual cycle? , " J. Biomed. Wholesale. 7 (4), 595-602 (2002).
2. R. Rotomskis, G. Strekite and S. Bagdonas, "Phototransformation of sensitizers 1. Significance of the nature of the sensitizer in the process of photobleaching and formation of photoproducts in aqueous solution," Photochem.Photobiol.39, 167-171 (1997).
3. R. Rotomskis, S. Bagdonas, G. Strekite, R. Venderburg, V. Dietel, J. Dzidziapetriene, A. Ibelhauptaite and L. Staciokiene, "Phototransformation of Sensitizers: 3. Implications for Clinical Dosimetry," Lasers Surg. Med. 13, 271-278 (1998).
4. A. Cournow, JS Haller and SG Baun, "Monitoring Oxygen During 5-Aminolevulinic Acid-Induced Photodynamic Therapy in Normal Rat Colon: Comparison of Continuous and Fractionated Light Regimes," Photochem. Photobiol.58, 149-155 (2000).
5. S. Müller, H. Walt, D. Dobler-Girdziunaite, D. Fiedler and U. Haller, "Improved Photodynamic Effects Using Fractional Laser Light," Photochem.Photobiol.42, 67-70 (1998).
6. W. Beyer, "Light Applicator and Dosimetry Systems in Photodynamic Therapy," Photochem. Photobiol.36, 153-156 (1996).
7. L. H.P Murrer, J. PA Marijnissen and VM Star, "Improvements in Linear Diffuser Design for Photodynamic Therapy," Phys. Med. Biol. 42, 1461-1464 (1997).
8. B.JTromberg, L.O.Svaasand, M.K.Fer, S.J. Madsen, P. Wyss,B. Sansone and Y. Tadir, "Mathematical model for light dosimetry in photodynamic destruction of human endometrium", Phys. Med. Biol. 41, 223-237 (1996).
9. H. E. van Bentem, H. J. M. Sterenborg, F. W. van der Meulen and M. J. C. van Gemert, "Oral Photodynamic Therapy Light Applicator Characteristics: Calculations and Measurements," Phys. Med. Biol. 42, 1689-1700 (1997).