PHOTODYNAMIC THERAPY: TREATMENT OF EXTERNAL AND INTERNAL GENITAL WARTS

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The warts are skin and mucous events due to human papillomavirus (HPV) and are transmitted sexually. The treatments have been used for medical (imiquimod 5% trichloroacetic acid, podossofilina and others) and surgery (laser, diatermocoagulazione, electric scalpel, cryosurgical) with relapses and side effects such as pain and sometimes bacterial infections.

The use of PTD with 5-aminolevulinic acid is an interesting technique for the local treatment of this disease. In this study, the treatment was performed in both women (with warts on the vulva, perianal, cervical, vaginal tubes, vagina and level of language) than in men (a level of the auction, urethral meatus, foreskin, the glans and region sovrapubica) with excellent response both in terms of both the compliance of patients. (Figure 1).

**Patients and lesions** - 11 patients, 6 men and 5 women aged between 16 and 38 years old have been treated. The clinical diagnosis was confirmed by an histological examination and by the hybridization HPV. Two of these patients had undergone a treatment diatermocoagulazione, while 9 patients had not undergone any treatment.

**Photodinamics therapy** - For the treatment was used 5-aminolevulinic acid (ALA) to 16% in form of gels, and ALA in sterile solution and buffered 1%.

At enrollment all patients were informed of the type of treatment and then was signed an informed consent. For larger lesions at the level of external genitalia was applied the gel that is administered at the ALA intralesionale solution, to have greater availability of the prodrug in infected cells. After the application was made an occlusive dressing. All patients were asked to wait for at least three hours, at the end of which was given the red light (630nm) with a radiant about 4-4.30 minutes of 180/210 J. The lesions were checked after 15 days of treatment and in cases not resolved with the first application was made immediately another treatment.

**Results** - Of the 10 cases handled have obtained a full resolution, but in 1 case not completely. In some patients were performed three treatments every 15 days. No side effects occurred, neither at the moment of the application of ALA, neither at the moment of light, except for a sense of intense heat. All patients were recontrolled (with variable range from 3 to 10 months) and no one has, to date, presented relapses.

**Discussion** - Photodynamic therapy for topical application or infiltration of ALA has not toxic effects neither local nor general, does not require local anesthesia or produces skin lesions and / or mucous membranes, it does not produce or scars Retracting stenosis or urethral meatus, was also observed Action eradication of infection with HPV of the reasons discussed. All these reasons lead us to believe that photodynamic therapy is a viable alternative to other treatments to cure HPV infections.