## Treatment of Large Condylomata of the Penis with the Neodymium-YAG-Laser

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Treatment of large condylomata of the glans penis with a neodymium-YAG-laser is reported. The method offers certain advantages over more conventional means of therapy, but requires expensive equipment, experience and that precautionary measures be taken when the high-power laser is operated. (Received February 28, 1984.)

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As early as 1973, Goldman and co-workers reported in this journal on the advantages of the Neodymium-YAG-Laser (Nd- YAG-laser) for dermatological surgery (1). This infrared laser type is now widely used in various medical disciplines such as urology, gastroenterology, surgery, gynecology and ophthalmology (2, 3). However, there are surprisingly few reports on its use in dermatology (4, 5). With the availability of powerful Nd- YAG devices, interest in its manifold applications is again increasing in our specialty (6).

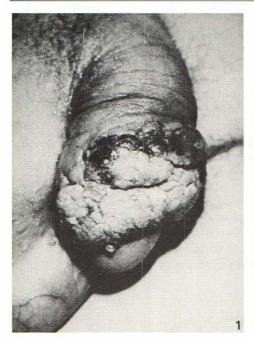




Fig. 1. Large condylomata of the penis immediately after therapy with the high-output ND- YAG-laser, one week after cirumcision.

Fig. 2. Same patient as in Fig. 1, eight weeks after completion of two treatment schedules with the Nd- YAG-laser for large condylomata.

We have successfully treated a patient with large condylomata of the penis with the Nd-YAG-laser. Because of the advantages the method offers we feel it worthwhile reporting briefly on our experience.

## CASE REPORT

When first seen in April 1983, the 30 year old patient presented himself with a large, papillomatous mass covering most parts of the glans penis, displacing the prepuce backwards and bulging it outwards, thus giving the impression of a paraphimosis.

The disease had started during a stay in Turkey about one year previously. At that time, the patient had not sought medical advice and had treated himself with an ointment. He reported that the lesion had started to grow rapidly only very recently.

To expose the condylomata and in order to prevent recurrences, circumcision was performed under local anaesthesia. After healing of the wound, the first treamtent with the Nd- YAG-laser "medilas" (Messerschmitt-Bölkow-Blohm. Munich, West Germany) was given with a total dosis of 3 572 joules (pulse energy 25 watts, pulse duration 3 seconds) (Fig. 1). Laser treatment was performed under spinal anaesthesia. Within four weeks, large parts of the condylomata had become necrotic and had fallen off. leaving only some small, shallow ulcers and some small, residual growths. A second laser treatment was performed on the growths. Healing was rapid, within a few weeks the penis returned to its orginal shape without any scarring (Fig. 2). The patient has been free of recurrences since.

## DISCUSSION

Due to its pronounced coagulation effect on biological tissues, the Nd- YAG-laser appears especially suited to be used for the destruction of various benign and malignant skin tumors (2, 6). Treatment with this laser type is simple, rapid, and causes little discomfort

to the patient. Furthermore, high output devices such as ours allow treatment of large tumors even in senescent patients (5).

Large condylomata of the penis and vulva are often difficult to treat and are a problem both for the patient and his physician (7). Especially in longstanding cases, there may even be the risk of malignant change (8). We feel, therefore, that the Nd- YAG-laser offers a rapid and simple therapeutic method for the treatment of even large condylomatas. However, operating such powerful lasers requires that certain precautionary measures be taken as well as some experience in adjusting the energy output to the desired coagulation depth. The high price of the instrument may also prevent wider application.

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