SPURIOUS IMPOTENCE AFTER HYPOSPADIAS REPAIR

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ABSTRACT—A fifteen-year-old who had undergone multiple hypospadias repairs alleged erectile dysfunction as a result of his surgery. A new method of nocturnal penile tumescence and rigidity monitoring supplied objective evidence to refute this allegation. Attention is drawn to the need for and availability of written documentation when diagnosing the presence or absence of erectile ability.

The legal implications of operative procedures frequently confront the physician, and this is especially likely after genital surgery. A case was referred to UCLA Medical Center in which a family contended multiple hypospadias repairs resulted in erectile impotence.

Case Report

The patient was a fifteen-year-old male circumcised at birth despite a penoscrotal hypospadias. Chordee release was performed in Manila at the age of three years, and the patient later moved to the United States where a urologist performed three hypospadias repairs during 1979 and 1980. In 1984, a different urologist performed further reconstructive surgery complicated by multiple fistulas that required additional surgical procedures.

The parents of the child expressed their dissatisfaction with the previous care and brought with them a briefcase containing pictures of the patient since birth, past medical records, and the address of an attorney to whom all findings should be forwarded. The family requested that we address the following issues: (1) the current cosmetic result, (2) a poor urinary stream, and (3) erectile impotence. When asked how the family knew of the patient's erectile difficulty, the mother replied that her son's erections were no longer present when she would bathe him.

On physical examination, we noted a scrotal skin flap located above the base of the penis and recommended skin Z-plasty to eliminate the mild penoscrotal transposition. To answer the question of the patient's alleged dribbling stream, we obtained a urine flow rate by the air-displacement method (Fig. 1). The patient

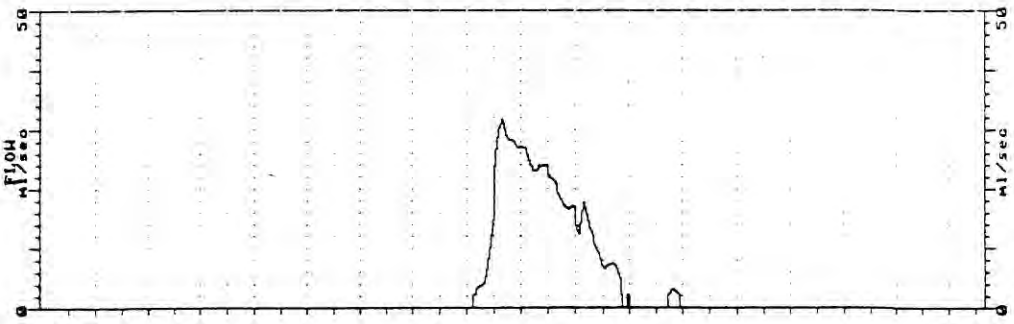

FIGURE 1. *Normal flow trace.*

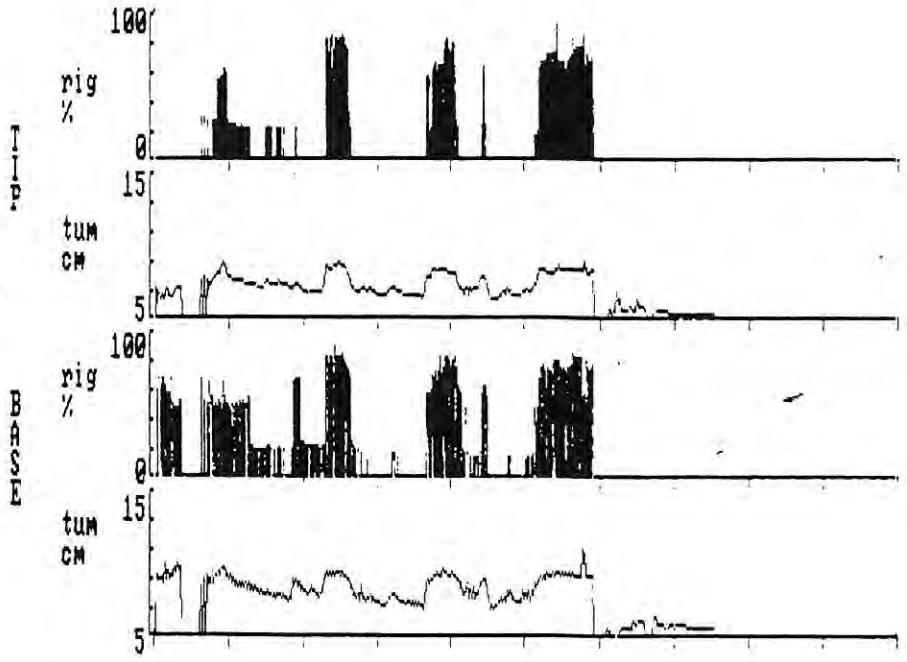

FIGURE 2. *Normal trace of rigidity (RIG) and circumferential expansion (TUM).*

had a peak flow of 31.7 cc/sec with an average flow of 15 cc/sec in a normal bell-shaped curve, all of which were normal.

To address the patient's loss of erectile function, objective data were necessary. The patient and family were instructed in the use of a commercially available penile tumescence and rigidity monitor* which they returned three days later. The first night session showed four normal erectile episodes with normal base and tip tumescence. Rigidity in both base and tip was 90 percent (Fig. 2). The second session was terminated after two and one half hours and the third sesson was never begun.

Comment

The Rigiscan is an ambulatory, continuous tumescence and rigidity monitor. Self-calibrating loops placed around the base and tip of the penis are worn during sleep to record frequency, duration, size, and rigidity of erections. This information is stored in a monitor which on return to the physician produces a tracing for placement in the patient's chart. A fifteen-minute tracing obtained in the office serves as a basis for comparison to the home tracing to ensure that the patient's own penis is monitored, and to guard against fictitious information being presented to the physician. The normal patient has three to six erectile episodes/night lasting twenty-five to thirty-five minutes, with an increase in girth of 3 cm at the base and 2 cm at the tip.[1-3] This should be associated with at least 70 percent rigidity in both base and tip.[4]

In the current litigious atmosphere, assertions of sexual dysfunction following genital surgery are becoming more prevalent and tangible evidence to the contrary provides the strongest defense against such claims. Although impotence is by its very nature subjective, clear demonstration of normal erections can refute allegations of surgically induced loss of potency. Nocturnal penile tumescence and rigidity monitoring provides the physician with an opportunity to obtain recorded information regarding erectile quality and frequency. We found this device essential in documenting the absence of impotency in the case reported here and hope that others will likewise benefit from its use.

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*Rigiscan, Dacomed Corporation, Minneapolis, Minnesota.

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