

The Epidemiology and Treatment of Anogenital Warts in Singapore: A Retrospective Evaluation

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Abstract

Introduction: A retrospective study in the referral centre for sexually transmitted infections (STIs) in Singapore to describe the epidemiology and treatment outcome of patients with anogenital warts. **Subjects and Methods:** We reviewed the case records of 301 patients with anogenital warts who were seen over a 1-year period (1999). We also attempted to interview every patient by telephone to find out if they had any clinical recurrences for which treatment was sought elsewhere. **Results:** There were 255 males and 46 females with a mean age of 34 years. Two hundred and nineteen (72.8%) presented with symptoms lasting 12 weeks or less. In males, warts occurred most frequently in the preputial cavity (52.5%) and on the penile shaft (40.8%). In females, they occurred most frequently on the external genitalia (91.3%). Two hundred and thirty-five males were treated with cryotherapy and 69% (95% CI, 62.6% to 74.8%) achieved clinical resolution after a mean of 6 treatment cycles. Seven males were treated with podophyllin 0.25% in ethanol and 71% (95% CI, 29.0% to 96.3%) were clinically cured after a mean of 4 treatment cycles. Thirty-nine females were treated with cryotherapy and 67% (95% CI, 49.8% to 80.9%) achieved clinical cure after a mean of 4 treatment cycles. Of the 290 patients treated at the centre, 212 (73%; 95% CI, 67.3% to 77.8%) patients (184 males, 28 females) achieved clinical cure after a mean of 7 weeks (range, 1 to 34 weeks); 90% (95% CI, 86.0% to 93.2%) of them by 15 weeks. Seven-two patients defaulted follow-up and 6 responded partially to treatment. Of the 212 patients who achieved clinical cure, 195 were interviewed by telephone, on an average, 17.7 months after clinical resolution. Thirty-seven (19%; 95% CI, 13.7% to 25.2%), all males, relapsed clinically after a mean of 100 days (range, 5 to 329 days); 90% (95% CI, 84.6% to 93.6%) relapsed by 228 days. **Conclusions:** Podophyllin 0.25% in ethanol was the most cost-effective treatment for males. One in 5 patients had a recurrence of their warts and most had their recurrence within 8 months of initial resolution.

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