Scissor excision of anogenital warts

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SUMMARY Anogenital warts were treated by scissor excision in 34 patients while under general anaesthesia; most patients were referred by the department of genitourinary medicine. In 28 patients who were adequately followed up the primary success rate was 71·4% and the rate of recurrence of warts was 9·3%. The technique gave good cosmetic results with few complications.

Introduction

Several techniques have been described for the treatment of anogenital warts, but the results of these methods have not been accurately recorded. Although the results of immunotherapy¹ and cryotherapy² are well documented those of surgical techniques have not been detailed. Thomson and Grace,³ however, described a simple method called scissor excision, which yielded good results. By this method saline-adrenaline solution (1/300 000) was infiltrated to separate the warts thereby allowing their accurate removal with scissors. The use of adrenaline also aids haemostasis. The aim of this study was to assess the merits of scissor excision in patients who presented initially to a department of genitourinary medicine.

Patients and methods

Most patients were referred for scissor excision of warts from the department of genitourinary medicine, Royal Infirmary, Edinburgh, between April 1980 and April 1982; the remainder were referred directly to the surgical unit. All patients were treated as inpatients. The procedure was performed under general anaesthesia with the patient in the lithotomy position. The method described by Thomson⁴ was followed accurately and is summarised below.

The area bearing the warts was infiltrated with saline-adrenaline solution (1/300 000). The amount required ranged from 20 to 150 ml depending on the number and distribution of the warts. Once the area had blanched, the warts were removed with scissors by cutting at the base of the wart. Cutting was performed from the back of the wart to the front so that exudate and blood did not obscure progress.

Intra-anal warts were excised in a similar manner using a Park's anal retractor, the saline-adrenaline solution being injected into the submucous plane. If an area of confluent warts was present the block of mucosa was excised and the defect repaired with 3/0 Dexon sutures. Diathermy was not required for haemostasis. The wounds were dressed with gauze swabs soaked in a 1/20 Milton solution. Post-operative sedation was given as required.

On the day after the operation the dressings were removed and the wounds inspected; the decision for discharge was usually made then. The patients were followed up in the department of genitourinary medicine with surgical liaison if required. Follow-up was continued until the patient was clear of warts. Residual warts were treated with topical application of podophyllin or frozen with liquid nitrogen. Warts were considered to have recurred in any patient who during follow-up was cleared of anogenital warts and then subsequently developed new lesions.

The results of this treatment were assessed from the case notes with special reference to duration of symptoms, complications, postoperative analgesia, length of inpatient stay, and recurrence rates.

Results

Thirty-four patients (24 men and 10 women) were treated; 28 had been referred from the department of genitourinary medicine and six direct from the surgical unit. The mean age of the patients was 26·9 years (range 18-59 years). The mean duration of the warts was five months (range two weeks to three years). During this time various treatments, including topical application of podophyllin, freezing with liquid nitrogen, or electrocautery, had been used in all except eight patients. In the 24 men (with the exception of one patient with an extensive ridge of warts in the genitocrural fold) all warts were perianal; in eight there was intra-anal extension of the condylomata. One of these eight patients had a

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corona of warts above the dentate line, which was treated by excision of a complete ring of mucosa and resutured as described above.

Of the 10 women, four had perianal warts alone and six perianal, vulval, introital, and intravaginal warts. In all the patients the extent of the lesions ranged from a moderate number of warts which had ceased to regress with conservative treatment to extensive circumanal vegetations causing considerable discomfort.

The only surgical complication was bleeding from an area of excision in one patient, which was easily controlled by a small under-running suture. Analgesia was not required in 17 patients while 17 were given a narcotic analgesic postoperatively.

The mean length of inpatient care was three days (range 2-8 days). Only six patients were in hospital for five days or longer, including one patient who bled postoperatively, one with extensive warts in the genitocrural fold, and one who stayed for social reasons. The remaining three patients had extensive intra-anal warts; as there is a risk of secondary haemorrhage in these patients they were kept in hospital for routine observation.

As six patients defaulted from follow-up complete data were available on only 28 cases. The mean length of follow-up was six weeks (range 4-16 weeks). During this time the mean number of attendances was three (range 1-8). Eight patients required no further treatment and two required only application of podophyllin at one attendance. These 20 patients were classed as primary cures—a rate of 71.4%. Of the remaining eight patients, cure was achieved within 16 weeks. In this group with a long follow-up some minor recurrences may have developed during treatment but this was difficult to assess. There were, however, three definite recurrences; one patient with a recurrence of circumanal warts required a further operation 12 months after his initial treatment and two developed recurrences four and six months after surgery but both were minor and responded readily to application of podophyllin. Allowing for the long follow-up group the recurrence rate in this series was 9.3%.

Discussion

The problem of tissue destruction exists with all direct treatments of anogenital warts. Whether treatment is chemical, by electrocautery, or by cryotherapy some normal surrounding tissue will be destroyed however accurate the application. This adverse effect is likely to increase discomfort and delay healing. In extensive warts it will also lead to excessive scarring and anal deformity. The method of scissor excision is unique in that it does not destroy surrounding tissue; only the abnormal tissue is

removed and there is little damage to the normal tissue.³

The results in this series are comparable with the original series—a primary cure rate of 71.4% compared with 58% and a recurrence rate of 9.3% compared with 16%. The better results in our series may be accounted for by the smaller number of patients rather than a more skilful technique. The other result which can be compared is the use of postoperative analgesia. In our series 50% of cases required no sedation, which is similar to that in the original series.

This study has also highlighted some new points about this method. In addition to us wound inspections were also carried out by other medical and nursing staff of the genitourinary medicine department. All were impressed by the cosmetic result, evident by the complete lack of scarring, compared with other methods. The nursing staff were also impressed by the minimal discomfort to the patient during the application of dressings. We realise that these are subjective observations.

The use of this technique for treating genital warts in female patients was not mentioned in the original report. Although our numbers were small the technique would seem equally effective for this condition.

The mean length of stay in hospital was three days; this could have easily been shortened. Local arrangements made it convenient to admit the patient to hospital one day before the operation. As most of the patients were young and fit, however, they could have been admitted and fasted on the day of surgery, thus reducing the stay in hospital by one day. This would have reduced the length of stay to two days in most patients and to day-case admission in selected patients.

In conclusion, scissor excision appeared to be an excellent technique for treating anogenital warts in patients attending a department of genitourinary medicine, and our results compared well with those of the original series.

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