Routine treatment of cutaneous warts: a questionnaire survey of general practitioners

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SUMMARY. A postal questionnaire was sent to 185 general practitioners to assess their approach to cutaneous warts and their views on the future development of the routine wart treatment service; 159 (85.9%) replied. A wide range of treatments were offered and most patients were given some treatment. The main reasons respondents gave for referring patients to hospital were failure of wart paints (73.6%) and lack of availability of liquid nitrogen (70.4%). Most general practitioners (74.2%) believed that dermatologists should spend less than 5% of their time treating warts. Many general practitioners (61.6%) wanted a practice-based wart clinic offering cryotherapy and 30.8% would like to refer directly to a hospital clinic run by a nurse. A practice clinic was more popular with general practitioners who have a treatment room nurse (P<0.01). Most seemed to appreciate the need for training to use liquid nitrogen. We conclude that general practitioners are keen to use cryotherapy and we argue that hospital management should provide the necessary resources for running a community-based service.

Introduction

IT is often argued that dermatologists spend too much of their time treating viral warts which could be dealt with in general practice.[1,2] Although a proportion of warts show resistance to many forms of treatment, most of them clear with either salicylic acid based wart paints or liquid nitrogen treatment that can be provided by the majority of general practitioners. It has been shown that general practice wart clinics can be made to run effectively and greatly reduce the number of referrals to hospital.[3]

However, unless the majority of general practitioners are willing and able to provide a range of treatments for cutaneous warts there is unlikely to be any noticeable reduction in the number of such patients seen in hospital dermatology departments.

In this survey local general practitioners were asked about their current management of warts and their views on the future development of the service.

Method

After an initial pilot study a questionnaire was mailed twice, three weeks apart in April 1988, to all 185 general practitioners in the Forth Valley area, serving a population of approximately 273 000. Questionnaires were also mailed to 23 trainees, but, for clarity and because only 13 replied, the results for this group are not presented here. A covering letter was sent with each mailing which made it clear that the results would be used in the planning of the service.

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Questions asked about the general practitioners' current practice and attitudes towards wart treatment, their views on the need for change and how the service could and should be developed locally, their experience of cryotherapy and perceived training needs. The number of partners and the sex of the doctor were known and pre-recorded. Other demographic details were requested.

Analyses consisted of descriptive statistics and cross-tabulations, both for interest and as checks on the reliability of responses where similar questions were being asked.

Results

Characteristics of respondents

One hundred and fifty nine general practitioners (85.9%) replied. There were no significant differences in the sex distribution or number of partners of responders and non-responders. Although some inconsistencies in responses were found these were not sufficiently serious to cause any questionnaires to be completely rejected.

The male: female ratio of the responders was 116:43. The median number of doctors in a practice was four (range one to seven); 129 were full-time and 30 were part-time. The age distribution was as follows: 34 years and under 24.5%, 35–44 years 37.7%, 45–54 years 15.1%, 55 years and over 22.0% (age not given 0.6%).

Treatment offered

The range of treatments currently offered by general practitioners is shown in Table 1. Two-thirds of the doctors (66.7%) had a treatment room nurse and 32.1% did not (no information for 1.2%). One-fifth of the doctors (20.8%) had nurses who provided some form of wart treatment.

The median estimated number of new patients seen each month with warts was four (interquartile range two to six). Of these, the great majority are offered some treatment. On average only about 10% are offered no treatment (interquartile range 0–25%), and 15% are eventually referred to hospital (interquartile range 10–40%). Only 6.9% of general practitioners estimated that they leave more than half their wart patients untreated and 37.7% never leave any untreated.

Table 1. Treatments for cutaneous warts offered by general practitioners.

Type of treatment	Number (%) of general practitioners offering treatment (n = 159)
Prescribed paints for self application	158 (*99.4*)
Paring, with or without application of caustic pastes:	
by general practitioner	53 (*33.3*)
by a nurse	22 (*13.8*)
Liquid nitrogen (used on the premises)	26 (*16.4*)
Cautery (used on the premises)	10 (*6.3*)
CO_2 snow (used on the premises)	5 (*3.1*)

n = total number of respondents.

Referral to hospital

The questionnaire asked for the main reasons for referring patients to hospital and suggested several possibilities (Table 2). The most common reasons were lack of availability of cryotherapy in the surgery and failure of warts to respond to at least three months treatment with a wart paint. The most frequent 'other reasons' for referral were multiple warts, periungual warts and warts on the face.

Table 2. Main reasons for referring patients with cutaneous warts to hospital.

	Number (%) of affirmative replies ($n = 159$)
GP only refers patients who do not respond to wart paint	117 (*73.6*)
CO_2 snow or liquid nitrogen not available	112 (*70.4*)
Patient will not accept that warts will go on their own	56 (*35.2*)
Patient asks to be referred	50 (*31.4*)
Patient already tried over-the-counter wart paint	31 (*19.5*)
GP believes wart paints are not much use	14 (*8.8*)
Wart treatment not an appropriate use of GP's time	3 (*1.9*)
GP wants the diagnosis confirmed	1 (*0.6*)
Other reasons	29 (*18.2*)

n = total number of respondents.

The great majority of general practitioners believed that dermatologists should spend only a small proportion of their time treating warts: 74.2% thought that less than 5% of dermatologists' clinic time should be used in this way and a further 14.5% thought an appropriate range would be from 6–15%.

Wart clinics

Most of the respondents (85.5%) thought that general practitioners who see a lot of patients with warts should set up their own wart clinics offering cryotherapy, and 74.2% thought that where facilities could be shared in a health centre, the different practices should combine to provide a clinic. The questionnaire did not define what would be a large enough workload to justify a clinic.

Only 47.8% thought that they and their partners saw enough patients with warts to justify offering a wart clinic themselves, but a further 30.8% thought that they could do so by combining with other practices. The majority (91.8%) said they would be willing to refer patients directly to a clinic run by a nurse at hospital without having the patient seen by a dermatologist first.

When asked for their preferred option for the treatment of their own patients in the future, 61.6% preferred a practice wart clinic (although 5.0% seemed uncertain as to whether they could justify a clinic or combine with other practices to make it practical), 30.8% preferred the idea of a hospital-based clinic run by a nurse to which they could refer directly, 4.4% wanted to maintain the status quo and 3.1% expressed no clear preference.

Of the 106 general practitioners who had a treatment room nurse 69.8% preferred the practice wart clinic option, compared with 43.1% of the 51 who did not have a treatment room nurse ($P<0.01$). The preference was independent of the number of partners in the practice and of the distance of the surgery from the nearest hospital with a dermatology department.

Cryotherapy

More than one-third of the general practitioners (36.5%) had given cryotherapy before, although it was not possible to assess the depth of this experience. Most seemed to understand that cryotherapy is not suitable for young children as the median age at which patients were thought likely to tolerate cryotherapy was seven years (interquartile range five to 10 years).

Of the 98 general practitioners who preferred a practice wart clinic 56 (57.1%) had no personal experience of using liquid nitrogen. Only 38 of the 56 wanted training for this and of the 44 who had a treatment room nurse, 35 would like the nurse to be trained. Surprisingly, 11 general practitioners would like their nurse trained but not themselves and seven did not seem to want any training for either themselves or the nurse.

Discussion

We were pleased with the enthusiasm shown by our local general practitioners for the idea that routine wart treatment is essentially a function of primary care and not the remit of hospital dermatologists. Between 9.2% and 21.4% of all referrals to hospital dermatology departments,[4] and as many as 33% of return visits[5] are for treatment of viral warts.

The most common reasons given for referral of patients to hospital were lack of availability of liquid nitrogen and failure to respond to wart paint. Most general practitioners already refer only those patients who fail to respond to three months treatment with a salicylic acid paint, as suggested by Bunney and colleagues;[6] only a handful of general practitioners considered wart paints to be of little value. Over a third said that patients will often not accept that warts go on their own and gave this as a reason for referral. The study thus showed that there is currently little alternative for a general practitioner, faced with a patient who demands treatment, other than to refer the patient to hospital if wart paint proves ineffective.

Most of the general practitioners believed that they could run a wart clinic, either within their own practice or by sharing facilities with other practices in a health centre. If their estimates of their workload from warts are accurate then their assumptions are probably correct. Those who do not wish to run their own clinics were happy with the idea that they should refer directly to a clinic run by a nurse. We have already shown that general practitioners' diagnoses are sufficiently accurate to permit either approach.[1]

It is clear that many general practitioners see wart treatment as a job for the treatment room nurse. Over one-fifth of doctors have nurses who are already treating warts in one way or another and it would be a logical step to provide them with liquid nitrogen; such an arrangement has been shown to work effectively.[3,7] We have discussed the advantages and disadvantages of delegation of wart treatment to nurses elsewhere.[1]

We are concerned, however, that although cryotherapy is a fairly simple technique it is, nevertheless, a procedure that has to be done correctly if adequate results are to be obtained with the minimum of side-effects. Training is essential for inexperienced personnel and indeed may be desirable even for those with experience of the technique. It is inappropriate, however, for the treatment room nurse to be trained but for the doctor to have no practical experience or knowledge of cryotherapy. The doctor remains legally responsible for the decision to treat, and so

must be familiar with the technique and be able to select suitable patients correctly. In particular, general practitioners need to be aware that cryotherapy is not suitable for certain types of warts or for very young children. Most general practitioners in this study appreciated this age restriction, and the age range of patients referred to our dermatology clinics suggests that this criterion is indeed being used (unpublished data).

In conclusion, we believe that there is strong evidence to show that all routine wart treatment, including cryotherapy, could and should be based in primary care. There may be some advantage in having all cryotherapy given by a small number of dermatological nurses, who could run clinics in the community, either in health centres or other suitable accommodation. This would be consistent with the view of most of the general practitioners in this study that practice-based (and by inference, community-based) treatment is most appropriate, and would allow those general practitioners who do not see a lot of patients with warts to avoid referring the patients to a dermatologist.

The general practitioners in our area, however, are inhibited by lack of availability of liquid nitrogen. Hospital authorities could go some way towards facilitating and funding the provision of liquid nitrogen. The hospital could act as a central storage point for liquid nitrogen and make arrangements for regular and reliable delivery. In our opinion it is appropriate to use hospital resources to fund an activity in primary care because of the mutual benefit obtained.

We are currently setting up a pilot project to provide liquid nitrogen to a number of local health centres. Cryotherapy will be given by the treatment room nurse and the scheme will be evaluated in clinical and economic terms. If this project is successful we hope to extend the provision of community-based wart clinics so that all general practitioners in the area have direct access to such a facility.

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