Treating plantar warts: what to do when patients take matters into their own hands

A patient applied bleach to her verrucas after they had not responded to treatment carried out by the hospital’s dermatology team. The outcomes are discussed.

INTRODUCTION
Plantar warts, also known as verrucae vulgaris, are a cutaneous presentation of the human papillomavirus (HPV). It is estimated that the prevalence is around 3.9-4.9% in children and adolescents (Cooper, 2005).

Plantar warts appear as round lesions, with defined limits and a keratotic surface, sometimes with induration and adjacent deep extension. An area of skin can become infected if it is in direct contact with a wart (Lipke, 2006).

Several treatments are available. The emphasis is on topical agents such as salicylic acid (a keratolytic agent), trichloroacetic acid and podophyllin.

Imiquimod, an immunomodulating agent, and 5-fluorouracil, a topical cytostatic, can be applied to plantar warts. Surgical treatment, by cryosurgery, curettage or excision, is also an option.

The treatment of plantar warts is complex and uncertain, as it is often necessary to try several treatments, alone or in combination.

BACKGROUND
Emma (not her real name) suffered from chronic reactive depression and had heart surgery in infancy because of congenital heart disease.

She was 28 years previously. Sixteen plantar warts had started appearing three to four months, she was totally healed. We found only sporadic and unscientific problems that make outcomes uncertain.

In Emma’s case because of the short space of time (Cooper, 2005).

RECOVERY
Under our supervision, Emma applied the bleach for three months twice a day. At the end of this period, we found 13 warts had disappeared, and the remaining three had reduced in size. All warts had disappeared totally after the fourth month.

There were no serious side effects, except mild soreness at the time of application and flushing of the limits in the vicinity of the lesions. The warts did not recur.

DISCUSSION
Plantar wart treatment presents various problems that make outcomes uncertain. The treatments have two basic fronts of action: inactivating the replication of HPV; and/or destruction of infected keratinocytes.

It is likely that the use of bleach acts in the same manner as Dakin’s solution (which is chemically analogous) by combining these two mechanisms, since this compound is active against several viruses and bacteria (Heggers et al, 1991) and causes debridement of cellular components (Bryant and Denise, 2007).

Although 6.7% of warts go into spontaneous remission within two years, this was unlikely to have happened in Emma’s case because of the absence of evidence on how it can be applied safely.

These matters are particularly important in the case of diabetic patients with circulatory disorders, or when the warts are in places that are more prone to develop severe skin lesions with the use of bleach, such as feet.

An alternative is to investigate the use of sodium hypochlorite 0.5% – a safer alternative to sanitary solutions of bleach. It is chemically analogous to sanitary bleach and has a similar mode of action.

CONCLUSION
This case demonstrates that bleach can be used to treat plantar warts, following scrupulous application and monitoring.

However, the lack of evidence means that it cannot be recommended as a safe and acceptable method for routine use in clinical practice.

Studies on sodium hypochlorite solution may show it is equally effective without the risks associated with bleach.

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REFERENCES
