SPECIALTY: GENERAL MEDICINE - DERMATOLOGY
CLINICAL PROBLEM: Management of Cutaneous Warts

These guidelines are based on Guidelines produced by The British Association of Dermatologists (B.A.D). They have been developed to assist the management of cutaneous warts in primary care

Approximately 70% of warts will resolve spontaneously by 2 years.

Differential Diagnosis
Plantar warts must be distinguished from callosities which are ill-defined areas of waxy, yellowish thickening, which on paring reveal no capillaries. Corns occur on pressure points and are usually smaller and painful with a central plug. (Plane warts must be distinguished from lichen planus which will normally show a violaceous discoloration and Wickham's striae.)

Transmission of warts
Warts are spread by contact, either directly from person to person, or indirectly via fomites left on surfaces. Infection via the environment is more likely to occur if the skin is macerated and in contact with roughened surfaces, the conditions which are common in swimming pools and communal washing areas. Socks can be used to cover warts and are available from pharmacists.

Warts and malignancy
Warts in immunocompetent individuals almost never undergo malignant transformation. Warty lesions are especially common in immunosuppressed and transplant patients and dysplastic change is quite common.

These guidelines do not cover therapy for anogenital warts. Patients with such warts are best seen and investigated by genito-urinary physicians to exclude the possibility of other sexually transmitted disease. If female patients prefer, referral can be made to the gynaecology department where they will be seen in the colposcopy clinic.

Treatment
There is no single treatment that is 100% effective and different types of treatment may be combined. Research into efficacy of treatment must take into account the possibility of spontaneous regression. It is a valid management option to leave warts untreated if this is acceptable to patients.

Facial warts should not be treated with wart paints because of the risk of severe irritation and possible scarring. Plane warts Koebnerize readily and any destructive technique may exacerbate the problem.

****The majority of warts can be treated in general practice and increasingly wart clinics are run by nursing staff. ****

A summary of treatments is given below

	Treatment	**Suggested method of use**
1	No treatment	
2	Cryotherapy	15-20 s single or double freeze of warts, every 3-4 weeks
3	Salicylic acid (SA) (A keratolytic)	Daily application of 15-20% salicylic acid in suitable base 2-5% SA cream may be used for plane face warts
4	Formaldehyde	3% solution as short soak for mosaic plantar warts
5	Topical imiquamod (Aldara)	3 times a week application for 8-12 weeks
6	Duct tape	Apply a generous piece to cool dry skin. Leave on for 4-5 days, pull off and then replace with a new strip.

Treatments for consideration according to site of warts

	Face	**Hands**	**Feet**	**Body**
1)	Consider no treatment	Consider no treatment	Consider no treatment	Consider no treatment
2)	**1st Line Treatments**			
	Plane warts			**Single**
	Salicylic acid (5% cream)	Salicylic acid preparation	Salicylic acid paint	Curettage + cautery
	Cryotherapy	Cryotherapy	Cryotherapy	Cryotherapy
		Formaldehyde	Formaldehyde	Duct tape
		Duct tape	Duct tape	
	Filiform warts			**Multiple**
	Cryotherpy	Cryotherapy	Cryotherapy	Cryotherapy
	Curettage and light cautery	Curettage + cautery Silver nitrate Duct tape	Silver nitrate Duct tape	Curettage + cautery Duct tape
3)	**Refer for 2nd line treatments**	**Only after 1st line treatment AND NOT AVAILABLE LOCALLY**		
		PDT	PDT	
		CO_2 laser	CO_2 laser	
		Pulsed dye laser	Pulsed dye laser	
		Systemic retinoids	Systemic retinoids	

Indications for referral

1) Some facial warts – if e.g. very unsightly (to the patient)
2) Immunosuppressed patients

REFERENCES: *British Association of Dermatologist Guidelines: Guidelines for the management of cutaneous warts 2000: Johnson LW. Communal showers and the risk of plantar warts. J Fam Prac 1995;40:136-8*

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