Castellani's paint

Manish K. Shah
Hon Dermatologist, Bhatia General Hospital, Tardeo, Mumbai - 400007, India.

Address for correspondence: Manish K. Shah, Hon Dermatologist, Bhatia General Hospital, Tardeo, Mumbai - 400007, India.
E-mail: appletrue@hotmail.com

Castellani's paint was perfected in 1905 by Aldo Castellani (1878-1971), an Italian physician and a specialist in tropical diseases. Castellani's paint is an excellent preparation for tinea cruris and moniliasis of intertriginous areas.[1] It is effective in pustular dermatoses of the hands and feet,[2] and has also been recommended for pruritus ani and pruritus vulvae.[3] Colorless Castellani's paint may be used to reduce secondary bacterial contamination in onycholysis and in chronic paronychia.[4]

CASTELLANI'S PAINT[5]

Basic fuchsin	0.3
Ethyl alcohol 95%	10.0
Boric acid	1.0
Phenol liquef.	4.0
Acetone	5.0
Resorcinol	10.0
Water to	100.0

Sig: Apply to affected areas at night with a cotton-tipped applicator daily at night. Then dry and dust with talc.

A colorless variety exists that is cosmetically more acceptable and less irritating, but purportedly less effective:

Alcohol 90%	8.5%
Boric acid	0.8%
Phenol	4.0%
Acetone	4.0%
Resorcinol	8.0%
Water to	100.0%

ROLE OF THE INGREDIENTS

Magenta or basic fuchsin:[6] Basic fuchsin is a dark purple liquid that appears red on the skin and can stain. It has local anesthetic, bactericidal (Gram positive) and fungicidal properties. It has also been reported to stimulate granulation tissue and epithelialization.

Ethyl alcohol: This has been used in Castellani's paint for its cooling properties.

Boric acid: Boric acid presumably has been included for antiseptic properties. It is rarely used topically nowadays because it is toxic when absorbed.

Phenol: Phenol is basically a caustic agent, which at lower concentrations inhibits nerve endings, acting as an anti-pruritic. However, high concentrations over large areas on the body can be toxic, particularly for the kidneys.

Acetone: Acetone is a solvent with cooling and cleansing properties.

Resorcinol: Resorcinol is an important constituent of Castellani's paint. It has anti-pruritic, keratolytic, anti-mycotic and anti-eczematous properties.

PRECAUTIONS

Initial irritation or stinging may occur, and can be circumvented by using half-strength Castellani's paint for the first few times. Castellani's paint is preferably

avoided in infants and children because of the potential for percutaneous absorption of phenol.[7] Rarely, allergic eczematous contact dermatitis to resorcinol in Castellani's paint used to mark radiotherapy ports has been reported.[8] Patients need to be warned regarding the staining of the clothes with Castellani's paint.

CASTELLANI'S PAINT IN CONTEMPORARY PRACTICE

Castellani's paint dramatically improves inflamed tinea cruris and intertrigo of the groins, particularly in patients with a history of long-term topical steroid application. Applying Castellani's paint is an effective way to dry oozing lesions, particularly in the groins and the toe webs.[9]

REFERENCES

1. Litt JZ. Alternative topical therapy. Dermatol Clin 1989;7:43-52.
2. Rees RB. A compilation of alternative therapies. Dermatol Clin 1989;7:53-62.
3. Griffiths WAD, Wilkinson JD. Topical therapy. In: Champion RH, Burton JL, Burns DA, Breathnach SM, editors. Rook/Wilkinson/Ebling Textbook of Dermatology. Oxford: Blackwell Science; 1998.
4. Domonkos AN, Arnold HL Jr, Odom RB. Andrews' Diseases of the skin. Philadelphia: WB Saunders Company; 1982.
5. Arndt KA, Bowers KE. Manual of dermatologic therapeutics. Philadelphia: Lippincott, Williams & Wilkins; 2002.
6. Rogers SC, Burrows D, Neill D. Percutaneous absorption of phenol and methyl alcohol in Magenta paint BPC. Br J Dermatol 1978;98:559-60.
7. Marks JG Jr, West GW. Allergic eczematous contact dermatitis to radiotherapy dye. Contact Dermatitis 1978;4:1-2.
8. Bielan B. 'If it's wet, dry it; if it's dry, wet it.' Occup Health Saf 1978;47:23-4.