

FOOT DERMATITIS

I. Differential Diagnoses

Shoe pattern

- Allergic contact
- Hyperkeratotic
- Pitted keratolysis
- Non-inflammatory fungus
- Chronic vesicular dermatitis

Insteps and heels

- Psoriasis
- Inflammatory fungus

Forefoot

- Atopic dermatitis
- Juvenile plantar dermatitis

II. Common Shoe Allergens

| <i>allergen</i> | <i>source</i> |
|---------------------------------------|----------------------|
| mercaptobenzothiazole | rubber |
| thiuram mix | rubber |
| carba mix | rubber |
| mercapto mix | rubber |
| dithiodimorpholine | rubber |
| potassium dichromate | leather |
| p-tert-butylphenol formaldehyde resin | neoprene gloves |
| Mixed dialkyl thioureas | neoprene |
| colophony | glues |
| formadehyde | fabrics |
| Nickel sulfate | metal |
| p-phenylenediamine | dyes |
| black rubber mix | rubber |
| ethyl/methyl acrylate | glues |
| preservatives | biocides |

III. OTHER ALLERGENS WHICH MAY MASQUERADE AS SHOE CONTACT DERMATITIS

- a. Topical medicaments, eq. steroids, antifungals, antibiotics, Bag Balm, botanicals
- b. Socks - Disperse yellow no. 3
- c. Plants, eq. woods, liverworts and lichens

IV. MANAGEMENT OF FOOT OR SHOE ALLERGIC CONTACT DERMATITIS

- a. While sorting out the diagnosis try all wood (clogs), all plastic, all sewn no glue leather, Birkenstock sandals

(NB. If patient clears using these shoes, ACD to shoes is increasingly suspect).

Use all new socks.

- b. Once patched and/or diagnosed; specify shoes:

HYPOALLERGENIC SHOES

- 1. A local cobbler who will use glues and fabrics you specify or:

- o The Cordwainer Shop
P.O. Box 110 / 67 Candia Road
Deerfield, NH 03037
(603) 463-7742

They make casual leather styles for men and women - sewn. They will send samples of leather for patch testing if requested. A catalog can be purchased for \$5. Call for more information.

- o P.W. Minor and Son, Inc.
3 Treadeasy Avenue
P.O. Box 678
Batavia, NY 14021-0678
Contact: Beth Anderson -Head of Custom Pair Dept. or
Robert Chamberlain
Telephone: (800) 524-1084

This company seems about the best bet for a custom-made shoe in the \$200. range. Their catalogue specifically advertises that they will custom-make hypoallergenic shoes which are vegetable-tanned leather with a cement-free upper. There is a wide range of shoes for both men and women, orthopedic use, work, dress, and casual use. You may need to order these shoes through a shoe store or through a hospital orthotics department. The company will send samples of leather, etc. for patch testing. This is probably worthwhile before ordering shoes, especially if you suspect a dye allergy.

- Loveless Orthopedic Appliance
2434 Southwest 29th Street
Oklahoma City, OK 73119
(405) 631-9731
www.lovelessboots.com

This company is also good for special order shoes and Musebeck Shoe Company in Oconomowoc, WI who used to make hypoallergenic shoes now refers all inquiries to Mr. Loveless. He can duplicate any shoe, but it will cost at least \$350. He will also send the leather for patch testing; it takes about 10 - 12 weeks and the patient should contact Mr. Loveless directly to learn the details of how the measurement should be made, etc. Specific information on positive patch tests with chemicals to be avoided, etc. should be sent to Mr. Loveless as well as to any other custom shoe maker.

2. **Chrome Free**

- Work Boots
Westcoast Shoe Company (West Co)
P.O. Box 706
Scappoose, OR 97956
(503) 543-7114

A family owned business. Vegetable-tanned shoe approximately \$205. + custom fit + additional price for leather, soles, and heels. Will supply pieces of leather for patch testing. Will make several styles of work boots on request from vegetable-tanned leather made by Muir and McDonald Tannery in Dallas, Oregon.

3. **Insoles**

- Dr. Scholls (are made and distributed by Schering-Plough of Memphis, TN)
8300 Maryland Avenue
St. Louis, MO 63105
(800) 766-6465 for general information
www.drscholls.com
 - Sports Cushion - flat, perforated polyurethane insole
 - Warm-Eze - fleece insoles (acrylic material) with latex rubber foam bottoms.
 - Air Pillow - insoles are latex and all of the Dr. Scholls odor-disguising insoles are latex. These include odor attacker insoles (no fragrance), Fresh-Step insoles (fragrance) and Sneaker Snuffers (no fragrance).
 - Non-latex alternatives include the Gel insole and Back Guard insole.

- Gel Insole - made of polyurethane gel with a laminated polyester top cloth. This product has NO: p-tert-butylphenol formaldehyde resin.
- Spenco Insoles
P.O. Box 2501
Waco, TX 76702
(800) 877-3626
www.spenco.com

Green and beige insoles are gas blown with a polyurethane adhesive; apparently do not contain thioureas in either the foam or the adhesive. It might be best to talk with Ray Cash at Rubatex Corporation who supplies Spenco to verify this. Their supports for knees, elbows, etc. are blue colored. They also make a gel cushion insole which is polyester and vinyl plastisol.

All leather or all wool insoles (are available in some outdoor stores eg. L.L. Bean)

- L.L. Bean replacement insoles - available by catalog or order from www.llbean.com and search for wool insoles.
 - Coldproof Insoles - Warm, high-grade sheepskin stitched to leather sole. Imported. Available in men's whole sizes. Women please order two sizes down. Men's whole sizes 3 to 14. Medium. TA11051. Leather Shank - \$12. Or Steel Shank - \$14.
 - Stay-Dry Insoles - Shock-absorbing urethane foam with an acrylic-pile footbed that moves moisture away from feet. Men's whole sizes 7 to 13. Medium. TA10808. \$7.00
- Piano felt cut to fit the inside of a shoe makes a good insole.
- Cork or composition insole from your local cobbler.

4. **PVC Work Boot**

- LaCrosse Footwear, Inc.
18550 NE Riverside Parkway
Portland, OR 97230
(800) 323-2668; (503) 766-1010
lacrossesafety.com/footwear.html

Polyurethane/leather work boots are available. A catalog is available online. Call or check online for more information.

5. **Wooden Clogs**

- The Clog Factory
217 1st Avenue S.
Seattle, Washington 98104
(206) 682-2564

This store carries a “Dutch” clog which is made completely of wood as well as a large selection of leather/wood clogs. They would be able to remove the rubber soles to make the shoe completely rubber free.

- Crary Shoe Company
8235 S.E. Stark
Portland, OR 97216
(503) 253-8984
www.craryshoes.com
- Multnomah Leather Shop
44420 Camp Morrison Road
Scio, OR 97374
(503) 394-2364
email: clogs@bhumsiva.com

Will make custom clogs. Contact them directly for more information.

- Dutch Wooden Shoes
Klagerstuin 16
Zwaag 1689 KB
Netherlands
www.dutchwoodenshoes.com

Can only purchase these shoes online. Email them to obtain more information.

6. **Plastic Shoes**

Usually PVC or polyurethanes

- Clogs-N-More
717 SW Alder Street
Portland, OR 97205
(503) 279-9358 fax: (503) 629-2114
www.alveus.com/clogs or www.clogsnmore.com

The Anywhere Shoe - made of “Axiflex” polyurethane foam. ANYWEARS can be autoclaved (sterilized) up to 100 degrees centigrade (212F) for hospital workers. Kitchen workers can throw them in a typical restaurant dishwasher. This store also carries wood/leather clogs with rubber soles.

- “Jellies” sandals are made of rubber-free plastic materials. Check in your area department stores for availability. One source found on the web was:

Melissa Grendha Shoes Corporation
Consumers Department
2481 Principal Row, Suite 300
Orlando, FL 32789
(888)887-0808
www.melissausa.com

Can order by phone or online. The style “possession” is a rubber free plastic sandal for females.

- Hammill International makes plogs, which are 100% polyurethane. Can contact them at 1-800-228-2129 or on the web at www.plogs.com .

7. **Athletic shoes**

We are unable to recommend a “hypo allergenic” athletic shoe with confidence

V. WHAT TO TRY IF UNABLE TO FIND AN ALTERNATIVE SHOE OR PATIENT WANTS TO TRY WEARING THEIR “REGULAR” SHOES:

- a. Decrease hyperhidrosis (tea or glutaraldehyde soaks) or DrySol.
- b. Buy all new socks (allergens are absorbed by socks).
- c. Use insoles described above appropriate to identified allergen or cork or piano felt insoles
- d. Try corticosteroid spray such as Kenalog spray before “dangerous” shoe wear (not a long term solution).
- e. Wood, all plastic, all sewn shoes made of leather, or old fashioned Birkenstock sandals.

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