THE SELECTION OF THE TYPES OF SHOES AND ITS IMPACT ON THE SKIN OF THE FEET
WYBÓR RODZAJÓW OBUWIA I JEGO WPŁYW NA SKÓRĘ STÓP

Khalid Al Aboud

Pathology Department, Wake Forest University, Winston-Salem, NC, USA

Corresponding author: Dr. Khalid Al Aboud amoa65@hotmail.com

Looking for a “healthy shoes”, what you are going to choose?

A shoe is an item of footwear intended to protect and comfort the human foot while doing various activities [1]. Contemporary footwear varies widely in, materials the make the shoes, style, complexity and cost and varies from culture to culture with the types originally being tied to function [1]. Shoes type may include boot, Boat shoes, sandals [2], Flip-flops [3], slippers [4], and others Basic sandals may consist of only a thin sole and simple strap. High fashion shoes may be made of very expensive materials in complex construction and sell for thousands of dollars a pair. Other shoes are for very specific purposes, such as boots specially designed for mountaineering or skiing [1]. Shoes have traditionally been made from leather, wood or canvas, but are increasingly made from rubber, plastics, and other petrochemical-derived materials [1]. A slipper or house shoe is a semi-closed type of indoor/outdoor shoe, consisting of a sole held to the wearer’s foot by a strap running over (or between) the toes or instep. Slippers are soft and lightweight compared to other types of footwear [4]. The foot contains more bones than any other single part of the body. It is vulnerable to environmental hazards such as sharp rocks and hot ground, which shoes can protect against [1]. People may choose to wear sandals for several reasons, among them economy (sandals tend to require less material than shoes), comfort in warm weather, and as a fashion choice [2]. Usually, people wear sandals in warmer climates or during warmer parts of the year in order to keep their feet cool and dry. The chance of developing athlete’s foot is lower than with enclosed shoes, and the wearing of sandals may be part of the treatment regimen for such an infection [2].

The use of flip-flops has also been encouraged in some branches of European and North American military as sanitary footwear in communal showers, where wearing flip-flops slows the spread of fungal infections [3].

While widely regarded to be comfortable, flip-flops do not provide ankle support, and can cause many foot-related problems [3].

Improper selection of shoes might trigger several skin and orthopedic problems. By precipitating abnormal motion, shoes can result in problems from the foot up into the hips [3].

Key words: feet dermatoses; onychomycosis; shoes

Streszczenie


Streszczenie


Key words: feet dermatoses; onychomycosis; shoes

Słowa klucze: choroby skóry stóp; onychomycosis; buty
Skin Problems related to the shoes

1. Trauma and skin injury:
   For each place (for example, a place containing water, or a mountains containing rocks and stones), there are a proper shoes to be wearied in order to protect the feet. Failure to select the optimal shoes for a given place might subject the feet for injury [3,5]. Some flip-flops, type of shoes, have a spongy sole, so when the foot hits the ground, it rolls inward and the sponge allows it to roll even more than usual. This is known as overpronation and causes many problems in the foot [3]. Poorly fitting shoes may precipitate in growing toes nails and diabetic foot syndrome [6,7]. Increased plantar pressure, especially beneath the metatarsal heads, and the resultant callus play an important role in causing diabetic foot syndrome [6,7].

2. Skin infection:
   Humidity by a closed type of shoes might precipitate tinea pedis. A case is, also, reported in which the prolonged wearing of combat boots and damp socks caused an acutely inflamed papulopustular candidiasis of the feet [8]. Wearing slippers can be used as a way to keep feet clean [4]. Deep fungal infection including Madura foot might result from injury of unprotected feet by a thorn or plant elements. Cutaneous larva migrans, is a skin disease, manifests as an erythematous, serpiginous, pruritic, cutaneous eruption [9]. It is caused by accidental percutaneous penetration and subsequent migration of larvae of various nematode parasites. It is common among barefoot beachgoers and sunbathers [9]. However, not all the footwear’s are protective against cutaneous larva migrans. A case is, reported, in which a woman developed cutaneous larva migrans despite wearing, protective’ footwear. The authors forwarded a hypothesis by which recently popular water shoes may actually be conducive to the development of cutaneous larva migrans rather than having a protective function [9].

3. Contact dermatitis:
   Different components of the shoes, like rubber, glue, dyes, may cause contact dermatitis [10]. Some of the chemicals in the shoes may cause leukoderma.

Conclusion
   Foot wears are important thing in the life of any person from the time that his or her feet touch the ground. Particular shoes might be suitable to the feet of one person but not to other. Patients with feet deformaties need a designed type of shoes that keep the balance of the person during walking and prevent friction or pressure to any points on the feet. It goes without saying that torn shoes should be repaired or thrown. Walking with damaged shoes may carry a risk to the person. People need to know that there is no, ‘medical shoes’ as such. Instead, there are proper shoes for each purpose [1]. Parents may teach the children the skills of selecting the right shoes for each purpose. What people describe as, ‘a comfort’ might not equal to, ‘medical’ or, ‘healthy’ types of shoes.
   Teachers in the schools might also guide the students about the right and the wrong things about their foot wears and may provide proper advices in this matter.

The nature of the, ‘ground’, a person is going to walk on, is the most important factor that dictates the type of the shoes a person should wear [1].
   The term, ‘medical shoes’ is a real myth generated by shoes industry and has no scientific base. Particular shoes might be good in one function but not good for other. For instance, a closed type of shoes is good for a protection but also generate a humidity that facilitates the occurrence of tinea pedis.
   Another example is that, some people advice the diabetics to wear slippers [4], as diabetes can have effects on blood flow to the extremities of the body. Wearing slippers can offer warmth and comfort that will allow a good flow of blood, but the problem is that, the slippers do not provide the protection needed for the feet of the diabetics.
   Most styles of slipper offer little or no support for the tender arch of the human foot. This is essential to children, whose young feet are still developing. The lack of support can allow the foot to roll inwards during walking, which can cause many health issues. Of course, opposing studies suggest that the introduction of rigid heels in slippers and shoes of infants and toddlers can actually inhibit a child’s ability to learn to walk as quickly as they would otherwise [3,4].

Some British schools have rules that enforce the wearing of slippers indoors. While this is a good method of regulating hygiene, some rigid-soled slippers can inhibit the correct growth of the child’s developing foot. This has caused some concerned parents quite some grief. While wearing slippers can offer comfort, it can also be a danger, in both terms of walking and movement, as well as the development of the young foot [3,4].
   But when different features for a shoe is in front of you remember that, ‘safety’, in a sense that the shoes will not affect the balance and prevent a person from falling down, and, ‘protection’ of the feet, from injury by the ground are far important over any other features. ”Safety, first, protection second”, is a phrase to remember this advice.
   In this sense, the closed type of shoes is better, provided that, you wear with it the proper socks that absorb the moisture and try to aerate the shoes from time to time by taking the shoes off.
   In addition, foot care after taking the shoes, by washing then drying and using moisturizers, will overcome the problems of humidity that result from using closed shoes for long time. The inside of shoes can be sanitized with germicidal shoe trees or other cleansing methods to prevent the growth of microorganisms such as odor-causing bacteria or fungi [1]. Selecting the proper size and weight of the shoes, that suit the person’s need is also important.
   Look carefully to the materials that made the shoes and try to avoid the ones that you are allergic its substances. Selecting proper shoes are of paramount importance in some high risk medical patients specifically, diabetics. Proper shoes are, with no doubt, instrumental in preventing diabetic foot syndrome and proved to reduce the incidence of amputations in diabetic [6,7].
   Diabetics should wear wide, well-fitting shoes without sutures on the inner side. The inside of the shoes should always be checked for foreign bodies or irregular surfaces before they are put on. Diabetics should not walk barefoot [6,7]. Callosities (calluses, corns) should be shown to the podologist or to the doctor.
They are always a sign of increased mechanical stress and therefore, require an adjustment of footwear. Trimming of callosities can only aim at giving symptomatic relief and does not replace an appropriate correction of the mechanical stress [6,7].

Finally, spending more on a better quality, better created shoe can influence the wearer’s health and safety [1].

REFERENCES

1. Shoe. [A page on the Internet]. From Wikipedia, the free encyclopedia Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc. [This page was last modified 2011 April 7; cited 2011 April 15]. Available at: http://en.wikipedia.org/wiki/Shoe

2. Sandal. [A page on the Internet]. From Wikipedia, the free encyclopedia Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc. [This page was last modified 2011 April 12; cited 2011 April 15]. Available at: http://en.wikipedia.org/wiki/Sandal

3. Flip-flops. [A page on the Internet]. From Wikipedia, the free encyclopedia Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc. [This page was last modified 2011 April 12; cited 2011 April 15]. Available at: http://en.wikipedia.org/wiki/Flip-flops

4. Slipper. [A page on the Internet]. From Wikipedia, the free encyclopedia Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc. [This page was last modified 2011 April 12; cited 2011 April 15]. Available at: http://en.wikipedia.org/wiki/Slipper


