

Blister: You're Busted!

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First you feel a hot spot of your skin. Then there is a burning sensation. You are probably on a long run and “into it.” You try to focus on other things, trying to take away the discomfort. Once fluid starts to accumulate between the layers of skin you have real pain. Yet, you persevere.

Once you finish, the pain really starts. Now you hobble to the medical tent for attention to your blister. You may have developed a blister while pruning limbs, or planting seedlings or bulbs in the yard. Blisters develop similarly with running.

WHAT HAPPENS

Rotation, friction, and shearing are the key words. When running, there is a constant rotation of the foot inside the shoe. Rotation is normal and part of the process of pronation, so it is important for the foot and leg to absorb the shock of hitting the ground. Rotation produces friction inside the sock and shoe. Friction leads to shearing of the layers of skin.

Shearing occurs when there is restriction of motion by the shoes. With shearing, there is separation of the layers of skin with fluid accumulating between the layers.

Ordinarily, the rotation is not a problem. However, the socks get wet with longer distances. Moisture prevents sliding of the skin inside the sock. Thus, friction increases.

WHAT THEY LOOK LIKE

Pretty, they are not. Painful they are, especially as time elapses after the run.

WHY THEY DEVELOP

Shoes that are too loose or too tight can predispose to blisters. If the foot attempts to rotate and the shoe is too stiff or there is an orthotic inside the shoe, there will be more friction and a greater tendency to develop a blister.

It may be hard to believe, but a wrinkle in your sock can even cause a blister. Believe it!

TREATMENT

If the blister gradually develops, it will not be very painful. These blisters can be left alone. The fluid will leak out. The top layer of the skin will gradually come off, permitting a new layer of skin to grow from below.

For fresh, very painful blisters, you can carefully clean the area with some antiseptic, (alcohol works well), and pierce the blister with a sterile needle. The fluid was drained and the blister covered with a clean bandage.

If you drain a fresh blister and cover it in this manner, the top layer of skin will often reattach to the under layer of skin. Reattachment is good.

PREVENTION

Friction prevention is the key. The main objective is to add layers between your skin and the inside of the shoe. The more layers the better. Why layers? They absorb friction. For example, I like to recommend two pairs of thin socks. The socks will rotate on each other. A simple trick is to place tape on the skin most prone to friction.

There has been considerable attention given to the sock fabric for preventing blisters. In the closed environment of a shoe, cotton gets wet from sweat and stays wet. If you are blister prone, cotton is not the best material. There are many synthetic fabrics and special socks available to decrease the chance of developing a blister. There are anti-blisters socks made by several companies. Coolmax, or polypropylene socks are better at wicking water away from the skin.

A variety of commercial products are available to minimize friction including Blistershield and BodyGlide.

In conclusion, long distance running can lead to blisters, no matter what you do. On your long runs, learn your limits, not just on your skin, but of your entire body. If you are blister prone, check your shoes to be certain they are not too tight or too loose. Use tape, specialized socks and lubricants to prevent blisters. If you get a blister, get to the medical tent.