

Stasis Dermatitis

Stasis dermatitis is a rash which occurs in the legs as a result of poor blood flow. Contrary to what many patients believe, blood flow **to the legs** isn't actually the problem. Instead, *stasis dermatitis* occurs because of poor blood flow **from the legs** and back to the heart.

To better understand this condition, it's first necessary to understand how blood circulates. It starts with our heart pumping freshly oxygenated blood out to all areas of our body. Once delivered, our body tissues use the available oxygen within this fresh supply and that same blood needs to be returned back to the heart. *Stasis dermatitis* occurs when this deoxygenated blood essentially gets 'stuck' in the legs.

There are several factors which can prevent blood from easily returning to the heart. First, it's literally being pushed against gravity when returning from the legs. Any obstruction it encounters along the way will further impede this flow, including excess abdominal weight such as that seen during pregnancy or obesity. Another contributing factor is when the 'one way' valves in our deep leg veins don't function correctly. These valves are supposed to prevent blood from flowing backward during its ascent to the heart. Whether due to genetics, age or injury, sometimes they just don't work properly.

The final result of motionless, deoxygenated blood ('*stasis*') under constant pressure causes the deep vessels to enlarge and leak a watery substance called *serous fluid*. This 'leaking' process in which fluid escapes from the deep leg veins is actually quite similar to that seen in so-called 'soaker hoses' which are used by gardeners. That is, water droplets will start to leak from the pores of these hoses as pressure builds from within:



SOAKER HOSE

When leaked into the surrounding tissue, this fluid causes swelling and impedes the flow of healthy, freshly oxygenated blood. The result is *stasis dermatitis*.

It's not always possible to change the factors which cause *stasis dermatitis* (e.g., malfunctioning 'one way' valves), but some *are* preventable (e.g., excess abdominal weight). Your dermatologist will talk to you about the best treatment options based on the pattern, frequency and extent of your condition.