Dry gangrene

In most cases, foot gangrene is a result of the compromised blood circulation, an insufficient

oxygen-rich and nutrient-dense blood supply usually caused by arterial - femoral, popliteal or tibial - obstruction (the human tissue dies from oxygen deficiency more rapidly than when deprived of any other nutrient).

The lumen of the artery becomes progressively narrowed up to the point of complete occlusion (blockage), causing normal blood flow to stop. In other words, gangrene develops if the blood supply deteriorates to a stage where insufficient blood is available to keep the tissues alive.

In early stages, dry foot gangrene causes dull, aching pain - the affected area is extremely painful to touch. In later stages of dry gangrene, the skin gradually changes in color to a dark purplish-blue, then completely black.

Standard medical approach to foot gangrene frequently leads to the "cut-and-medicate" treatment nightmare, usually resulting in

- *debridements* - procedures that involve the surgical removal of devitalized tissues, and/or

- *amputations* - procedure involving the surgical removal of entire parts of the body (toe, foot, or leg).

Unfortunately, there is still a common perception that gangrene represents an unstoppable and irreversible process - - a foot severely starved of blood cannot survive - - the only "solution" to which is to amputate an affected limb in order to preserve your life.

Although this fatalistic perception often is *not true*, **left untreated, gangrene** - depending on the severity of someone's condition -
can be fatal
.

You are most at risk for developing gangrene, if you have an underlying chronic medical condition that interferes with your blood circulation, usually manifesting itself in the form the interrupted blood supply to the tissues. This may occur as a result of a number of conditions, including:

- diabetes
- atherosclerosis - either related to diabetes or hyperlipidemia (elevated blood lipids)
- thrombosis - a clot in a blood vessel, also related to atherosclerosis
- extreme cold injury (frostbite).

Gangrene may occur in *hypoxia* involving a deficiency of oxygen in the body's tissues. In other words, if connective tissues are destroyed due to the obstruction of their blood oxygen supply - as occurs in hypoxic stress or oxygen starvation - gangrene may develop. Hypoxia is also speculated to be an underlying cause of many cardiovascular diseases.

The most common contributing factor in developing of gangrene -- accounting for *95 percent* of all cases of gangrenous damage -- are degenerative changes associated with advanced **atherosclerosis**
, mainly in a form of

- peripheral vascular disease (PVD) or
- lower extremity arterial occlusive disease due to a clogged or obstructed artery (thrombosis).

The second contributing factor in developing of gangrene, and at the same time one of the underlying causes of atherosclerosis, are the degenerative changes associated with chronic **type 2 diabetes**
(diabetes mellitus).

Unfortunately, the individuals with dry gangrene most often has *multiple other health problems* that complicate recovery, and it is usually those
other system failures

that can prove fatal.