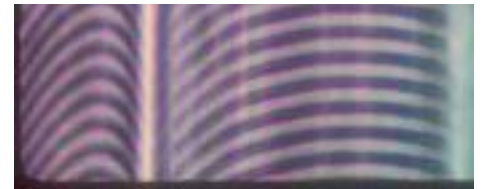


# What is a muscle “knot” or adhesion?

Skeletal muscle, as its name implies, is the muscle attached to the skeleton. It is also called striated muscle. Skeletal muscle is made up of thousands of cylindrical muscle fibers bound together by connective tissue through which run blood vessels and nerves. Increased strength and muscle mass comes about through an increase in the thickness of these individual fibers and an increase in the amount of connective tissue.



An example of the striations in skeletal muscle

A knot or trigger point is an irritated patch of muscle. The nerve that controls it is firing too quickly, or there has been some trauma to the muscle fibre and the tissue is full of junk molecules.

Once the initial injury has occurred, a cycle of repair and re-tear develops that leads ultimately to a large tender knot developing in the muscle, which comprises muscle fibres surrounded by scar

tissue. “Scar tissue as being like chewing gum stuck and hardened to a wool carpet” Gerard Hartman



**Minor muscle tears. The formation of intramuscular scarring (top and centre) can painfully limit broadening on contraction (bottom).**

In the muscle the scar tissue is inflexible so when the muscle either contracts forcibly (shortens and broadens) or stretches (lengthens and narrows) the scar tissue re-tears and the cycle of repair and re-tear develops with increased irritation and more scar tissue is laid down. Excessive Scar Tissue Formation at the site of tear inhibits normal contractibility and extensibility of muscle.