TRIGGER POINTS

Drs. Janet Travell & David Simons (1993) described a trigger point as, "A highly irritable localized spot of exquisite tenderness in a nodule in a palpable taut band of (skeletal) muscle." These hyperirritable localized spots can range in size, and have been described as a 'tiny lump' and 'large lumps'; they can be felt beneath the surface embedded within the muscle fibres. If they are tender to pressure they may well be 'trigger points'. The size of a trigger point nodule varies according to the size, shape and type of muscle in which it is generated. What is consistent is that they are tender to pressure. So tender, in fact, that when they are pressed, the patient often winces from the pain; this has been called the 'jump sign'. Myofascial trigger points may well be implicated in all types of musculo-skeletal and mechanical muscular pain. Their presence has even been demonstrated in children and babies. Pain or symptoms may be directly due to active trigger points, or pain may 'build up' over time from latent or inactive trigger points. Studies and investigations in selected patient populations have been carried out on various regions of the body. These have confirmed a high prevalence of trigger point pain.

There is some evidence that myofascial trigger points may be present in babies and children (Davies, 2004); they have also been demonstrated in muscle tissue after death. Trigger points develop in the myofascia, mainly in the centre of the muscle belly where the motor end plate enters (primary or central). However, secondary or satellite trigger points often develop in a response to the primary trigger point. These satellite points often develop along fascial lines of stress. External factors such as ageing, body morphology, posture, weight gain or congenital malformation, etc., also play a crucial part in trigger point manifestation.

EVIDENCE

In 1957, Dr. Janet Travell discovered that trigger points 'generate and receive' minute electrical currents. She determined experimentally that trigger point activity could be accurately quantified by measuring these signals with an electromyogram (EMG). She went on to demonstrate that a trigger point could be accurately and reliably located by the same technique. This is due to the fact that in its resting state, electrical activity in muscles is 'silent'. When a small part of the muscle goes into contracture, as with a trigger point, it causes a small, localized spike in electrical activity. More easily, trigger points can be palpated beneath the skin in specific locations. They are localized, nodular and discrete and are characteristically painful, producing reproducible patterns of referred pain.

- **ACTIVITY**
  - ✓ **DEFINE ACCUPUNCTURE POINTS AND TRIGGER POINTS.**
  - ✓ **DIFFERENTIATE BETWEEN FIBROMYALGIA AND TRIGGER POINTS.**