

Joint Play

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Joint play is one aspect of the subluxation complex. There are three movements within a joint: active, passive, and joint play. According to Dr. John Mennell's research, joint play occurs within the paraphysiological space within a joint. Without this normal joint play, nutrients cannot be exchanged, thus, degeneration occurs. According to Dr. Mennell, "Voluntary movements cannot be achieved unless certain well-defined movements of joint play are present. Movements of joint play are independent of the action of voluntary muscles. These joint play movements are very small but precise in range; it is upon their integrity that the easy, painless performance of movements in the voluntary range depends. Their integrity, not their range, is the basis of their importance. It is the summation of movements of joint play and movement in the voluntary range that make up the movement of the living anatomy."¹

"Commonly, joint play dysfunction is the cause of secondary muscle changes."² The secondary muscle changes are mainly atrophy and spasm. Spasm is usually caused by nature's attempt reflexively to prevent painful joint movements. This whole process is interlinked with the actions of the nervous system; thus, we can call this whole process part of the subluxation complex. Whatever the reason for the loss of joint play, when a joint is not free to move, the muscles which move it cannot be free to move. The following are other factors which occur when joint play dysfunction is involved:

1. Hypermobility
2. Muscles and muscle response
3. Pain reflex cycle
4. Dispersive factor (Dr. Moyal, 1988)
5. Compensation/Adaptation

These are just a few of the things which should be considered before administering an adjustment.

The next consideration is treatment of joint play dysfunction. The following steps should be taken after trauma to a joint and its surrounding tissues. Of primary importance would be to first ice the area involved in order to reduce the inflammation. Next, one should increase the range of motion. If this range of motion can be taken to the point of tension-fixation, the adjustment should then be given.

The last step is rehabilitation to both the joint and its muscles, ligaments, tendons, fascia, and

articular cartilage. By rehabilitation, there will be no nerve interference since now the vertebrae will be moving correctly by way of normal muscle function. In this process of rehabilitation, one should first determine whether there are ligament and/or muscular adhesions since these tissues contribute to both nerve interference and pain.

Finally, by toning the muscular system, the transmission of nerve impulses can be efficient and prevent future joint play dysfunction. One would not want to administer muscle strengthening exercises without first creating joint play. Otherwise, articular surfaces within a joint will not glide smoothly among each other, causing destruction of the surfaces and ultimately leading to capsulitis. This could cause irreversible damage within a joint which could cause constant nerve irritation.

The following are a few basic truths about joint play from Dr. Mennell's work:

1. When a joint is not free to move, the muscles that move it are not free to move.
2. Muscles cannot be restored to normal if the joint which they move is not free to move.
3. Normal muscle function is dependent on normal joint movement.
4. Impaired muscle function perpetuates and may cause deterioration in abnormal joints.

"The primary fault usually lies in synovial joints which make up joint play. And if the primary fault can be corrected, the secondary abnormalities resulting from it can usually be readily corrected too."³

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References

Faye, L. John. (c)Motion Palpation Institute Notes., Huntington Beach, Calif. 1987.

Mennell, John. Joint Pain., Little Brown and Company, 1983.

Footnotes

1. Mennell, John. Joint Pain, Little Brown and Company, 1983.
2. IBID
3. IBID

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