



## Frozen Shoulder and Diabetes..... Is There A Connection?



Frozen Shoulder, AKA “adhesive capsulitis” is a common shoulder condition that I treat in my SE Portland chiropractic and nutrition clinic, Optimum Function (<http://optfunction.com>). What surprises patients is when I ask about their blood sugar or hemoglobin A1c; often, no one has considered diabetes, pre-diabetes or another physiologic cause of their shoulder issue.

Frozen Shoulder is a syndrome (meaning, a set of symptoms) that is not well-defined but usually consists of painful restriction of shoulder movements that results in overall decreased shoulder mobility. It is often deemed “idiopathic”; this means that there is usually no identifiable cause for the problem.

To consider all frozen shoulders idiopathic would be overlooking a variety of physiological states that can lead to this condition.

### Possible Non-Mechanical Causes of Frozen Shoulder

The physiological conditions most commonly associated with frozen shoulder are **diabetes**, hypothyroidism/hyperthyroidism, and hypertriglyceridemia.

### Here are some facts when considering the link between diabetes and frozen shoulder:

- The incidence of frozen shoulder is **2-4 times higher** in people with diabetes than in the general population.
- The total prevalence of diabetes (frank diabetes and pre-diabetes or metabolic syndrome) in patients with frozen shoulder was **71.5%**
- Shoulder capsulitis is common in type I and type II diabetic patients. However, it occurs more commonly as the diabetic patient ages

### Why???

Patients with diabetes clearly have a higher incidence of frozen shoulder. While the “why” behind these stats is not clear, we can speculate that poor circulation may lead to abnormal collagen repair and speed up degenerative changes. The theory is that platelet derived growth factor is released from blood vessels that have become inefficient due to the diabetic condition. This growth factor will then act as a stimulus to scar tissue development which will help to continue this process leading to a vicious cycle that started because diabetics have problems with the small, peripheral blood vessels.

**So, please take this information the next time someone tells you that your shoulder dysfunction can be diagnosed as Frozen Shoulder.**

Yours in Health,

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