

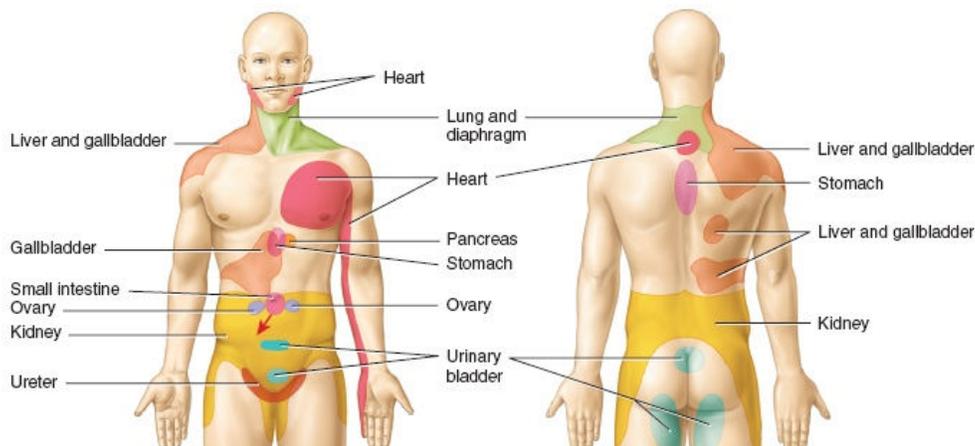
The Shoulder - Liver Connection

By Dr. George Roth

There are several interconnections between the shoulder and liver. As you know, liver injury (which is very common) may cause the right lower rib cage to become a major primary restriction. Because these ribs are the attachment points for the pectoral muscles, the latissimus dorsi and other muscles, this restriction may result in fascial restrictions, which may directly limit the ROM and biomechanics of the shoulder girdle.

In addition, the primary restrictions associated with liver injury may also produce reflex inhibition of the supraspinatus muscle, leading to instability of the shoulder joint. (See article: *Restoration of Joint Stability with Matrix Repatterning*, in the introductory manual or online)

Another component is neurological. Liver injury, and its resulting enlargement, may create mechanical stress on the diaphragm. As you may also recall, the nerve supply to the diaphragm is the *phrenic nerve* which originates at the C3 to 5 level of the cervical spine. This also happens to be the major motor and sensory nerve supply to the shoulder. The referral pattern, between the shoulder and the liver/gall bladder, is well documented in the medical literature.



Visceral Referred Pain Patterns

As matrix practitioners, our job is to correct the cause of the condition. Understanding the connection between the liver and the shoulder, which may be biomechanical and/or neurological, can provide us with a powerful tool. We also have the unique ability to demonstrate the effects of this connection to our patients, even before treating them, by applying the scanner to the primary restriction (liver area) and demonstrating an improved ROM and stability of the shoulder.

Most therapeutic approaches to shoulder dysfunction tend to be limited to the shoulder and cervical spine. The liver represents a common and significant contributor to shoulder girdle dysfunction and pain. Other considerations include the cranium, teeth, cervical spine, upper thoracic spine (aortic pattern), spleen, pericardium and upper extremity (intraosseous) injury

among others.

Matrix Repatterning provides us with a unique framework for understanding the profound interconnectedness of the body, which allows us to determine the underlying cause of many conditions. Expanding our awareness of the biomechanical, physiological and neurological relationships in the body can make us better practitioners, with the ability to provide a much higher level of health care to the public.