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AVAILABILITY

Monday & Tuesday
9:00 to 3:00
Wednesday
3:00 pm to 8:00 pm
Thursday & Friday
12:00 am to 8:00 pm
Saturday
3:00 pm to 6:00 pm

MASSAGE MENU

- ★ Swedish massage
- ★ Thai Massage
- ★ Myofascial Release
- ★ Lymphatic Drainage
- ★ Triggerpoint Therapy
- ★ Insurance receipts
- ★ Gift Certificates
- ★ Hot Stone
- ★ Visa / MC welcome

The Lymphatic System

I've been asked many questions about the lymphatic system and drainage lately, so here goes...

In our circulatory system, watery fluid leaks from the blood (vessels) into the tissue spaces. For our cardiovascular system to work properly, this leaked fluid must be collected and carried back to the blood to be recycled. This is where the lymphatic system plays such an important role.

The lymphatic system has two main parts:

1. A meandering network of lymph vessels (think of these as roadways) that occur almost everywhere blood vessels occur; it is a one way system that flows only towards the heart.
2. Various lymph organs scattered throughout the body which contain immune system cells (think of these as checkpoints with authoritative guards or customs officers).

Lymphatic capillaries collect excess the leaked fluid and transport it along increasingly larger channels back to the thorax, where it gets emptied back into the venous circulation. Lymph vessels have one way flaps and are very thin skinned so as to allow plasma proteins (good guys), bacteria, viral particles, cancer cells (bad guys), and cell debris to enter from the tissue spaces. The downside is that the bad guys can use the lymphatic system to travel throughout the body. This dilemma is somewhat resolved by having to go through "customs checkpoints". In passing through the lymph nodes the fluid is examined by immune system cells (customs officers), and cleaned of debris, riffraff and dangerous criminals. Since

the lymphatic system doesn't have an organ to act like a pump, it relies on the low pressure milking action of active muscles, pressure changes in the thorax, and valves to prevent backflow. The process is slow and sporadic compared to the venous system – 3 liters of lymph re-enters the bloodstream every 24 hours. If lymph vessels are blocked by tumors or removed via surgery (such as a mastectomy), then severe local swelling can happen. Drainage is eventually re-established by re-growth from remaining vessels in the area.

You may recognize the names of the lymph organs (checkpoints) that house immune system cells (guards): the spleen, tonsils, thymus and lymph nodes. Lymph nodes are bean shaped, about 1 inch in size, and there are hundreds of them throughout the body. Large clusters of superficial lymph nodes occur in places where lymph vessels converge to form large ducts, such as the creases where your arms and legs join the body, and in the neck. Lymph nodes have two functions:

1. The immune system cells in the nodes remove and destroy bad cells to prevent further passage, especially to the blood, where they can travel and spread further and faster.
2. As the immune cells monitor the stream of lymph for foreign invaders, they are able to activate other immune system cells (S.W.A.T. teams) in mounting attacks against the bad guys.

Lymph nodes can be overwhelmed by a large amount of bacteria and viral particles that become trapped – this makes the nodes inflamed, swollen and tender to the touch.

Next month I'll explain the effects of massage on lymphatic fluid, and the importance of lymphatic drainage in the breast.