

How lymph waste becomes clean again

Any relaxing or stimulating massage, exercise or complementary treatment that increases blood flow consequently swamps the lymphatic load. With no continuous heart beat or column of fluid through its vessels and relying on a pressure change, how does the lymphatic system move all this extra fluid to keep our body healthy, cells clean, immunity in check and our protein levels stable? How does the lymph know where to go to get rid of it? Filtering and cleaning throughout the system is a mammoth task, particularly poignant when it's job, so vitally important, is left, pretty much to fend for itself. We don't touch it, we leave it alone, to - `get on with it`.

So, what does the blood need to release and or transport? Excess fluid, foreign substances, excess protein, trans fats, water, excess fat, unknown matter, toxins, any dead cell, waste or debris from the veins, poison, infection, chemicals, metabolic waste and anything else in excess or deemed as harmful. The lymphatic system throughout the body takes control of all the above, twenty-four seven.

Transportation though lymph vessels

Carrying and transporting, lymph vessels resemble veins in structure but have thinner walls and valves in shorter distances than the blood circulatory system so that the lymph can be kept in tighter control. Lymphatic vessel valves are passive (inactive) but regulate direction of flow to the Watersheds (fig 1) or areas of lymph that control correct movement, cleaning and filtration. Carried along by the lymph vessel between the valves is the smallest amount of lymph (fig 2) and is surrounded by a proximal and distal valve and is the way the lymphatic system moves throughout the entire body, one unit at a time.

Once filled, the lymph load along with volume, stretches the wall and its smooth muscle responds with a contraction causing lymph movement (fig 2). These contractions are supported by skeletal muscle and joint pump, arterial respiratory pressure changes and negative pressure in the central veins. Their intrinsic contractions are determined by autonomous regulation through the sympathetic nervous system and the lymph volume.

Over the entire body there are specific root areas (fig 1) to control this process. You could not have the system flowing all over the body, you need it contained and root areas are directional sections in the body that the lymph nodes and their pathways of lymph vessels move towards. This ensures a complete cleaning system and root path for all lymph vessels within that region. They filter and pump through lymph from that area, keeping all pathways open helps to prevent a possible back log or build-up within the root region. When our bodies are under attack it can result in root areas feeling painful as they fight the infection. A couple of examples of this; painful armpits and groin area felt in Glandular Fever or aching joints and flu like symptoms from an infection called Cellulitis.

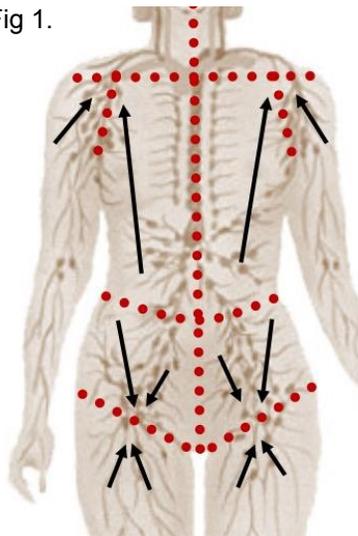
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In Summary

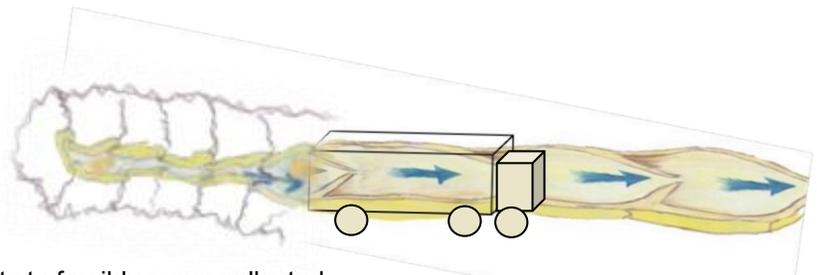
Collected waste, along with transportation of essential substances through this system is easier to visualise if you relate the flow to resemble a fully laden lorry moving along a road. These roads must have a directional flow with gates (valves) preventing back flow to allow forward movement. Then imagine a traffic jam and these lorries full of fluid must move up the traffic jam, but only one lorry at a time. However, this movement can only continue to occur if the road ahead is clear. Junctions (root areas), which are a gathering and merger of roads is where the body can pump most effectively, i.e. usually near a joint. This increased directional entry into many lymph nodes boosts cleaning and enables continuous movement of the lorries. Lorries start on C roads (capillaries) and work their way along B (vessels) and A (ducts) roads.

Introduce an integrated lymph massage to assist and stimulate swamped lymphatic flow and give a boost to the main A road. Boosting the Thoracic duct means the B and C roads can work far more efficiently because the road ahead has been cleared. And finally, into Vena Cava and the heart, the destination of the cleaned, filtered and fresh lymph mixes with the blood back along the arteries and toward the end of the venous return where the process starts all over again.

Fig 1.



Root areas determine flow of lymph through the body for maximum cleaning and filtering of waste.



Full up, the lymphatic capillary contracts to forcibly move collected waste along into the lymphatic vessel. This small amount (one lorry load) is now surrounded proximally and distally by valves to prevent back flow and moves through the whole system.

Fig 2.