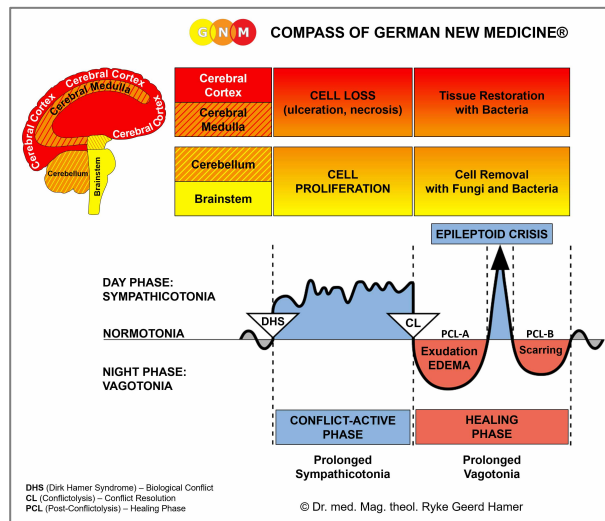




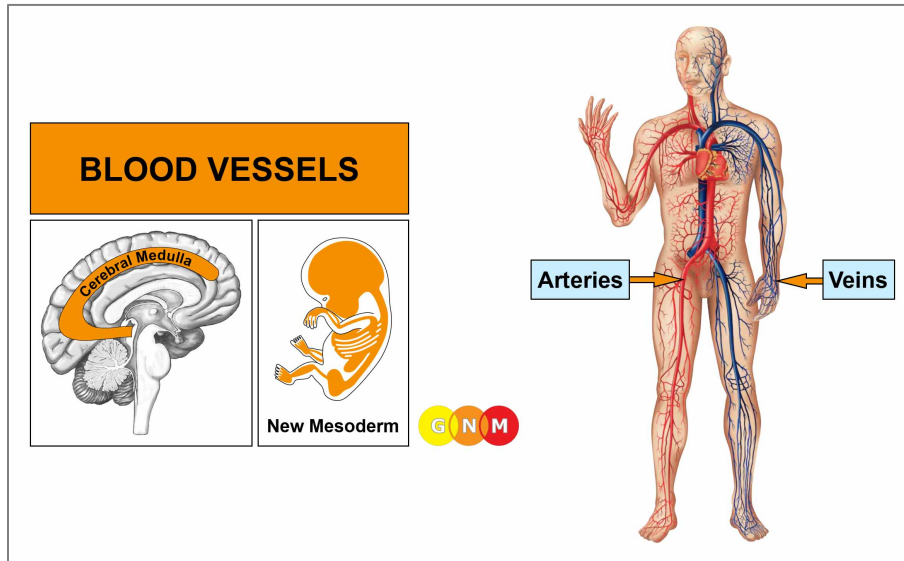
BIOLOGICAL SPECIAL PROGRAMS

BLOOD VESSELS

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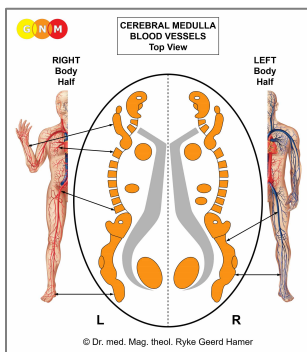


Arteries

Veins

DEVELOPMENT AND FUNCTION OF THE BLOOD VESSELS: The blood vessels make up the body's cardiovascular system. The systemic circulation carries oxygenated blood from the left ventricle through the **arteries** to the various tissues of the organism. In the capillaries, the smallest of blood vessels, oxygen and other nutrients are exchanged for cellular waste and carbon dioxide. The **veins** take de-oxygenated blood back to the heart and deliver it through the right heart chambers and the pulmonary arteries to the lungs. The pulmonary circulation returns oxygenated blood from the lungs to the left atrium, which empties into the left ventricle, completing the cycle of blood circulation. The blood vessel wall is endowed with connective tissue, smooth muscles, and striated muscles. Equal to the intestinal muscles that move the "food morsel" along the intestinal canal through peristaltic motion, the smooth muscles of the arteries and veins facilitate the flow of the "blood morsel". The inner lining of the arteries and veins, the so-called intima, originates from the new mesoderm and is therefore controlled from the cerebral medulla.

NOTE: The intima of the cerebral arteries, descending aorta, external carotid arteries, outer sections of the subclavian arteries, and abdominal aorta is of new mesodermal origin (controlled from the cerebral medulla) whereas the intima of the coronary arteries, coronary veins, ascending aorta, internal carotid arteries, and inner sections of the subclavian arteries derives from the ectoderm (controlled from the cerebral cortex).



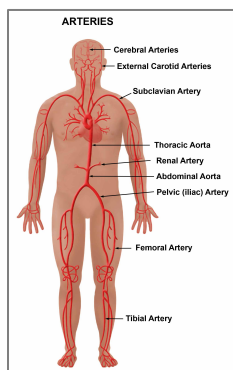
BRAIN LEVEL: In the **cerebral medulla**, the arteries and veins of the right side of the body are controlled from the left side of the brain; the arteries and veins of the left side of the body are controlled from the right cerebral hemisphere. Hence, there is a cross-over correlation from the brain to the organ.

NOTE: The bones, skeletal muscles, lymph vessels and lymph nodes, blood vessels, connective tissue, and fat tissue share the same brain relays and therefore the same biological conflict, namely a self-devaluation conflict. The control centers are orderly positioned from head to toe.

ARTERIES

BIOLOGICAL CONFLICT: The biological conflict linked to the arteries is a **light self-devaluation conflict** experienced in the area of a particular artery. The specific self-devaluation conflicts are the same as for the bones and joints.

In line with evolutionary reasoning, **self-devaluation conflicts** are the primary conflict theme associated with **cerebral medulla-controlled organs** deriving from the new mesoderm.



A person who has a hard time walking (after an accident, illness, surgery) can suffer a **self-devaluation conflict** (physical performance conflict) affecting the arteries of the legs (**femoral arteries**) or the feet (**tibial arteries**). The **abdominal aorta** is linked to a self-devaluation conflict associated with the abdominal area (abdominal pain, constipation, Crohn's, colon cancer diagnosis, surgery) and the fear that something is wrong "there". The same applies to the **thoracic aorta** that runs through the chest and other arteries such as the **renal artery** or **pelvic artery** which supply the kidneys and pelvic area. The **outer sections of the subclavian arteries** carrying blood to the shoulder and arms relate to a relationship self-devaluation conflict (having failed as a partner or as a parent). The **external carotid arteries** that deliver blood to the face and the scalp as well as the **cerebral arteries** are linked to an intellectual self-devaluation conflict. The cerebral arteries respond also to the distress of "the brain doesn't get enough oxygen"; a parent can suffer this conflict for and with a newborn.

NOTE: Whether the conflict affects an artery on the right or left side of the body is determined by a person's handedness and whether the conflict is mother/child or partner-related. A localized conflict affects the artery that is closest to the site associated with the self-devaluation conflict.

CONFLICT-ACTIVE PHASE: **localized necrosis (cell loss)** of the artery proportional to the degree and duration of conflict activity. While the intima necrotizes, the smooth muscles of the artery become thicker in order to prevent a perforation of the arterial wall. However, if an intense conflict persists for a long period of time, the blood vessel wall becomes weak causing a localized bulge or **aneurysm**, for instance, in one of the **external carotid arteries** (compare with carotid artery aneurysm related to the internal carotid artery). A **cerebral aneurysm** in other brain arteries than the carotid arteries is extremely rare. The most common location of arterial aneurysms is the abdominal aorta, specifically the segment of the abdominal aorta below the kidneys. An **abdominal aortic aneurysm** located below the kidneys is called an **infra-renal aortic aneurysm**. Small aneurysms may go completely unnoticed. However, as the aneurysm becomes larger there is a greater risk of rupture. Normally, the smooth muscle fibers embedded in the striated muscles of the arterial wall stabilize the blood vessel. Hence, an aneurysm rupture only occurs because of a vigorous move, lifting something heavy, or pressing too hard during a bowel movement. Hemorrhaging into the abdomen is a medical emergency. When a cerebral aneurysm bursts, this causes bleeding in the brain (compare with bleeding due to a ruptured brain cyst). A brain hemorrhage, however, is not related to a stroke, as claimed by conventional medicine.

HEALING PHASE: During the first part of the healing phase (**PCL-A**) the necrotized area in the affected artery is replenished through **cell proliferation** with localized **swelling**. Bacteria, if available, assist the healing process, potentially accompanied by an **inflammation (arteritis)**.

The blood vessel is repaired with the help of calcium and cholesterol. With continuous conflict relapses, plaques accumulate at the site leading to **atherosclerosis** and, eventually, to a narrowing of the lumen of the blood vessel. Over time, the arterial wall hardens and loses its elasticity, a condition known as **arteriosclerosis**. Atherosclerosis in the penile arteries, linked to a sexual self-devaluation conflict, restricts the rush of blood into the penis required to get and maintain an erection; the narrowed blood vessels compromise the function of the penile erectile system causing **erectile dysfunction** (see also erectile dysfunction related to the corpora cavernosa). In the major arteries (coronary arteries, ascending aorta, internal carotid arteries, and inner sections of the subclavian arteries) the atherosclerotic plaques certainly compromise the blood flow but do not cause a heart attack or a stroke, as claimed.

In the **legs**, the swelling and buildup of plaques narrow the lumen of the artery leading to **pain and difficulties walking**. Medically this is referred to as **peripheral artery disease** or “**intermittent claudication**”. For a **person unfamiliar with GNM**, the pain usually triggers new self-devaluation conflicts (“My legs are useless!”) resulting in a chronic condition. If the striated muscles of the leg arteries are involved due to a leg-related motor conflict (not being able to run away, not being able to walk because of pain) **leg cramps**, typically in the calf muscle, occur throughout the Epileptoid Crisis. With ongoing conflict relapses the constant spasms constrict the blood vessel. The narrowing of the affected artery is often diagnosed as a “peripheral artery disease”, even though there are no “diseased” changes of the blood vessel itself.

VEINS

BIOLOGICAL CONFLICT: Like the arteries, the veins are also linked to a **self-devaluation conflict**. The specific self-devaluation conflicts are the same as for the bones and joints.



The **leg veins** relate in particular to a **ball-and-chain conflict**, experienced as a limitation of the freedom to move. A pregnancy, having to care for someone, a “clingy” person, feeling shackled to a place, a job, a project, or a relationship can provoke the conflict. People with professions that require standing or sitting a lot (cashiers, taxi drivers) are more likely to suffer the conflict, unless they truly enjoy their work.

NOTE: Whether the conflict affects the veins of the right or left leg is determined by a person’s handedness and whether the conflict is mother/child or partner-related.

CONFLICT-ACTIVE PHASE: **localized necrosis (cell loss)** proportional to the degree and duration of conflict activity. While the intima necrotizes, the smooth muscles of the vein become thicker in order to prevent a perforation.

HEALING PHASE: During the first part of the healing phase (**PCL-A**) the necrotized area in the affected vein is replenished through **cell proliferation**. With an inflammation (**phlebitis**) the area around the vein is red, warm, and tender. Bacteria assist the healing process, provided they are available.

NOTE: **Staphylococcus bacteria** are also involved during the healing of a vein that was injured through an intravenous injection or the use of a venous catheter. In fact, any invasive devices harming a tissue will activate bacteria to assist wound repair. This explains the prevalence of the methicillin-resistant *Staphylococcus aureus* in hospitals.

The accumulation of fluid in the healing area creates a **peripheral edema**, for example, in the ankles, feet, and legs (see also peripheral edema related to the myocardium or to the leg bones; compare with lymphedema).



Concurrent water retention due to the SYNDROME increases the swelling considerably, as shown in this picture. For a right-handed man, the swelling of the right leg indicates that the ball-and-chain conflict or the self-devaluation conflict (not being able to keep up) was associated with a partner.

In conventional medicine, pain and swelling in the leg are often misdiagnosed as “**deep vein thrombosis**” or “**thrombophlebitis**”, based on the wrong assumption that the swelling and inflammation of the vein is caused by a thrombus.

NOTE: A **thrombus** is a blood clot that forms when blood is not moving and subsequently coagulates. Such a thrombus can develop in the lower extremities after an operation, an induced coma, a prolonged stay in bed, or following an injury. Any sort of prolonged inactivity increases the risk of blood clotting in the deep veins of the leg. Pain is caused by the stagnant blood. At some point, small pieces of these clots may break away, travel through the venous system and lodge in the lungs. A clot in the lungs can lead to a lung embolism without a DHS (see coronary veins). However, if a person is mobile, the working of the calf muscles and the contractions of the muscles in the blood vessel wall facilitate the flow of blood through the venous system, reducing the risk of blood clot formation. Small clots are broken down in the bloodstream and absorbed by the body, a process called fibrinolysis. At any rate, a blood clot can never cause a heart attack or stroke, as argued since, in the event of an obstruction, auxiliary vessels supply the heart and the brain with blood (see carotid arteries).

Example of a Medical Narrative

“In cardiovascular disease, abnormal clotting can result in a heart attack or stroke. Blood vessels injured by smoking, cholesterol, or high blood pressure develop cholesterol-rich build-ups (plaques) that line the blood vessel; these plaques can rupture and cause the platelets to form a clot. Even though no bleeding is occurring, platelets sense the plaque rupture and are confused, thinking that an injury has taken place that will cause bleeding. Instead of sealing the vessel to prevent bleeding as would occur with a cut, a clot forms in an intact blood vessel, causing a blockage of blood flow” (*American Heart Association*, September 30, 2003).

Varicose veins are a hanging healing in the leg veins caused by continuous conflict relapses. The leg valves that prevent blood from flowing backward are also affected. With recurrent repair processes the valves become scarred (PCL-B) and porous with the result that the veins thicken.

Varicoceles are varicose veins that develop in the scrotum. In this case, the self-devaluation conflict is associated with the testicles. This would explain why varicoceles typically develop in puberty.



This picture shows a man with varicose veins on his left leg. If he is right-handed this reveals a ball-and-chain conflict related to his mother or his children; if he is left-handed the conflict would be associated with a partner.



So-called **spider veins** are small varicose veins, caused by a ball-and-chain conflict (on the legs) or a self-devaluation conflict ("I am not pretty there") associated with the area of the body where they appear, for example, on the face, the chest, or on the abdomen (during pregnancy).

NOTE: All organs that derive from the new mesoderm ("surplus group"), including the blood vessels, show the **biological purpose at the end of the healing phase**. After the healing process has been completed, the organ or tissue is stronger than before, which allows being better prepared for a conflict of the same kind.

Source: www.learninggnm.com