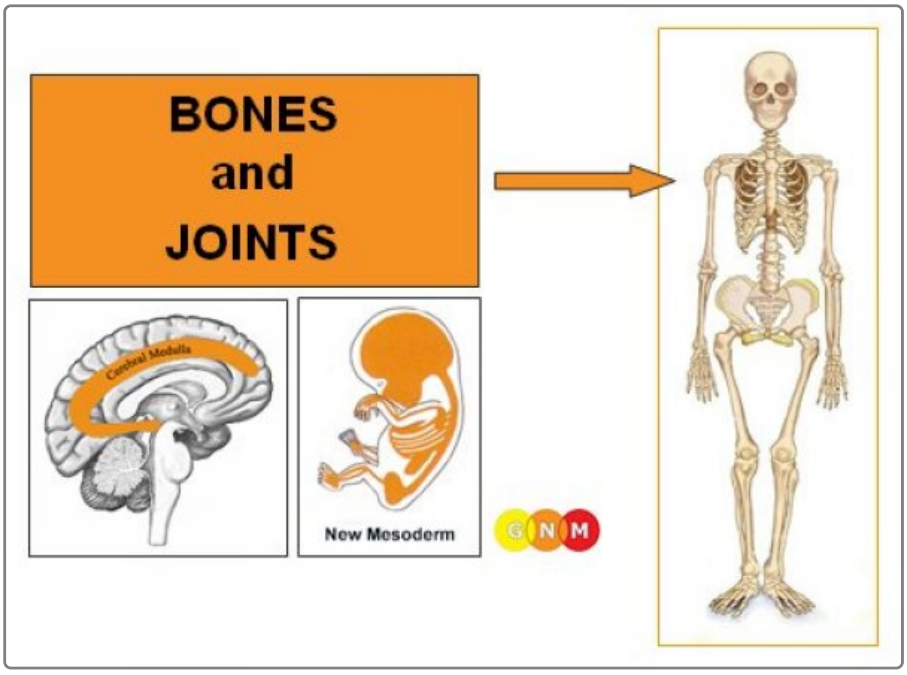
BONES & JOINTS Expand this ...

BONES & JOINTS



Biological Conflict **Conflict-Active Phase** **Healing Phase**

Anemia and Leukemia

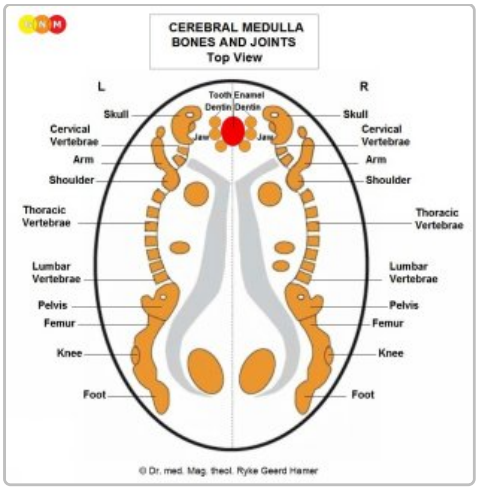
DEVELOPMENT AND FUNCTION OF THE BONES AND JOINTS: The skeletal system includes all bones and joints of the human body. **Ligaments, tendons, cartilage**, and connective tissue connect and stabilize the bones. Together with the skeletal muscles, the bones and joints allow controlled physical movements. They also provide protection for many of the body's internal organs. The ribs, for example, protect the pleural cavity containing the heart and lungs. The bone tissue stores several minerals, specifically calcium and phosphorus that keep the bones strong. The red bone marrow inside of bones produces most of the blood cells, including erythrocytes (red blood cells), leukocytes (white blood cells), and thrombocytes (platelets). Most bones of the limbs contain mainly yellow bone marrow composed for the most part of fat. However, if the body suffers large amounts of blood loss, yellow marrow is converted into red bone marrow to ensure blood cell production. Osteocytes ("mature bone cells") and osteoblasts ("immature bone cells") are the major cellular components of bone. Osteoblasts are bone-building cells that also form callus required for bone repair (see also dentin-producing odontoblasts). The outer surface of the bones is covered by the periosteum, except the joints and sites attached to ligaments and tendons, which are capped with cartilage. The firm cartilage surface reduces friction during joint movement (compare with elastic ear cartilage). The cartilage is covered by the perichondrium, the equivalent to the periosteum lining the bones.

> **NOTE:** The embryonic skeleton is mainly made up of cartilage which is gradually replaced by bone. This process, called ossification, does not complete until after birth. Some parts of the body remain as cartilage, for example, the tip of the nose and the external ear.

The bones as well as the cartilage, tendons and ligaments originate from the new mesoderm and are therfore controlled from the cerebral medulla.

BRAIN LEVEL: In the **cerebral medulla**, the bones and joints (incl. cartilage, tendons, and ligaments) of the right side of the body are controlled from the left side of the brain; the bones and joints 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 with 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.

BIOLOGICAL CONFLICT: The biological conflict linked to the bones and joints is a **severe self-devaluation conflict or loss of self-worth**. The cartilage, tendons, and ligaments correlate to a light self-devaluation conflict.

> 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 **generalized self-devaluation conflict** concerns the whole person. The conflict is experienced, for example, through humiliation (accusations, scoldings, derogatory remarks), abuse (physical, sexual, verbal), failure (at work, in school, in sports, in a relationship, as a parent or partner), a poor performance (intellectual, artistic, athletic), or feelings of shame and guilt. The loss of a status, the loss of a workplace, retirement, illness or injuries ("I am out of commission"), aging ("I am not as good as I used to", "I am getting old and useless") or the loss of a person, who made one feel appreciated and needed, are other conflict scenarios. The way we perceive ourselves or speak to ourselves ("I am a failure", "I will never succeed") create mental predispositions for generalized self-devaluation conflicts. Children and the elderly are more vulnerable to suffer the conflict.

A **localized self-devaluation conflict** (see localization) relates to specific part of the body. A poor artistic or athletic performance, for example, corresponds to the hands or legs. A self-devaluation conflict brought on by a cancer diagnosis (colon cancer, prostate cancer, breast cancer), a negative prognosis ("You won't be able to walk again!"), the removal of an organ (mastectomy), or continuous localized pain correlates to the nearest bone or joint. In comparison, a moderate self-devaluation conflict would involve the closest lymph node or muscle.

> **NOTE:** Whether the conflict affects a bone or joint on the right or left side of the body (or both sides) is determined by a person's handedness and whether the conflict is mother/child or partner-related. A localized conflict affects the bone or joint that is associated with the self-devaluation conflict.

LOCALIZATION: Each part of the skeletal system has its specific conflict content.

Skull and Cervical Spine: intellectual self-devaluation conflict. The conflict could be triggered by failing an intellectual task (in school, at work), by having made a mistake, or by condescending remarks of teachers, coaches, employers, colleagues, a parent or a partner, making a person feel "slow" or "stupid". People who have an occupation that is intellectually demanding (scholars, academics, writers, and others), whose self-worth is built on their intellectual achievements, or are academically overambitious are more susceptible to experience the conflict. Self-talks ("I am an idiot!", "I am not smart enough!") can generate a self-inflicted loss of self-worth. The fear of failing might already activate the conflict. Unexpected **injustice** ("This is not fair!") also affects the skull and cervical spine.

Facial Bones: self-devaluation concerning ones look or reputation

Orbital Eye Socket: self-devaluation related to the eyes, for example, after surgery ("You look like a monster!")

Jaw bones: not being able to bite, literally or figuratively

Ossicles and **mastoid** in the ear: self-devaluation associated with the ears (hearing impairment)

Shoulders, Humerus (upper arm) and Collar Bones: relationship self-devaluation conflict (having failed as a partner, parent, colleague, friend, or team mate) often in association with guilt and blaming oneself. A poor performance, let's say, in sports (baseball, handball, golf, hockey) also affects the shoulder, as the "joint of action".

Elbows: self-devaluation involving the elbow, for example, in sports (tennis, squash), playing a musical instrument (violin, cello), or work-related activities. Also, not being able to embrace or hold a person or a pet, associated with the elbow(s).

Wrist, Hands and Fingers: **dexterity conflict** caused by failing a manual task or by a poor manual performance. People whose self-confidence relies predominantly on their manual achievements, whose occupation requires fine motor skills (surgeons, dental hygienist, jewelers) and finger dexterity (typing, needle work, playing a musical instrument such as the guitar or the piano) are more likely to suffer this type of self-devaluation conflict.

Ribs and Sternum: self-devaluation conflict prompted, for example, by a breast cancer diagnosis, a mastectomy, or a heart condition (see heart valves)

Thoracic and Lumbar Spine: central self-devaluation conflict that shatters the core of one's self (humiliating and degrading treatment). The lower back is also associated with feeling **unsupported** ("not backed up") by a family member, partner, friend, teacher, colleague, or employer. A cancer diagnosis related to the area of the thorax (lung cancer) or the lumbar spine (prostate cancer, kidney cancer, colon cancer) or constant pain (abdominal pain, menstrual pain) affect the closest vertebrae.

Pelvis and Pubic Bone: sexual self-devaluation conflict. Sexual abuse, erectile dysfunction, not "performing" as expected, finding out that the partner is having an affair, sexual rejection, feeling devalued below the waist, not getting pregnant, miscarriages, a hysterectomy, a prostate cancer diagnosis, prostate surgery, or urinary incontinence could provoke the conflict.

Coccyx and Sacrum: self-devaluation associated with the buttock; "a tergo" sex perceived as humiliating, pain during intercourse, local symptoms (hemorrhoids, chronic diarrhea, vaginal dryness)

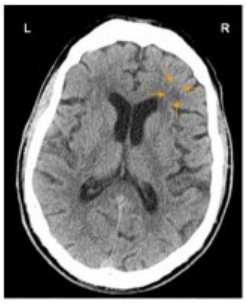
Ischial Bone: inability to posses something (we figuratively "sit on" what belongs to us in order to secure it), being unable to sit something out, not being able or allowed to sit on one's place (desk, car, bike, motorcycle, horse)

Hip and Femoral Neck: not being able to endure a situation because of unexpected or continuous demands ("This is too much to carry!", "I can't manage!" , "I can't get through this!"). The **femur** is linked to a **physical performance conflict**.

Knee and Lower Legs: physical performance conflict, for example, difficulties walking or climbing stairs, not being able to keep up, a poor performance in sports (having lost a game, being put on the reserve bench, humiliating remarks by an instructor, not performing up to our standards or the expectations of a coach, parent, or spouse), feeling less mobile during pregnancy or because of having gained weight

Foot, Ankle, Heel and Toes: **not being able to walk, run, jump, dance,** or **balance**; also, not being able to kick someone away in defence. The underside of the heel is linked to not being able to "crush" a person or a situation.

CONFLICT-ACTIVE PHASE: During the conflict-active phase the affected **bone decalcifies** creating gaps and little holes in the bone. The location of the **osteolysis** ("bone breakdown") is determined by the exact type of self-devaluation conflict; the degree by the intensity of the conflict. The decalcification of the bone increases the serum calcium levels (compare with hypercalcemia related to the parathyroid glands); the loss of bone marrow that occurs together with the bone osteolysis alters the blood parameters (see Anemia and Leukemia).



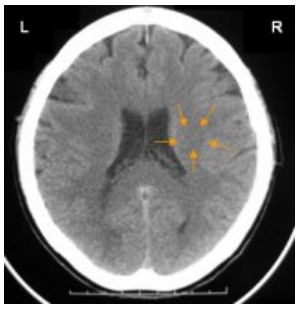
This brain CT shows a Hamer Focus in the area of the cerebral medulla that controls the left shoulder (view the GNM diagram). The sharp border of the ring structure indicates conflict activity with a relationship self-devaluation conflict associated with a partner, since the person is left-handed.

NOTE: A Hamer Focus in this brain relay corresponds to the left shoulder joint, the surrounding cartilage, tendons, ligaments, connective tissue, fat tissue, or the closest lymph node (axillary node) since these tissues share the same control center. In this particular case, the osteolysis in the left shoulder was confirmed by an X-ray.

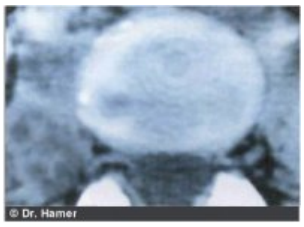
A decrease in bone mass is commonly called **osteoporosis** ("brittle bone"). Conventional medicine claims that osteoporosis is linked to a decline of estrogen production in women after menopause. The theory of a correlation between bone loss and estrogen deficiency is purely hypothetical, because there are postmenopausal women who don't have osteoporosis and there are women who have osteoporosis before they enter menopause. Men get osteoporosis as well and so do children, but men and children are not under pressure to undergo regular bone density tests. They are not (yet) considered to fall into a "risk group". Osteoporosis in men is also played down as it doesn't fit the definition of a woman's disease caused by a lack of estrogen.

From a GNM point of view, osteoporosis is a lasting generalized self-devaluation conflict affecting most of the skeletal system. The steady bone decalcification caused by continuous, often subtle self-devaluations could be compared with dripping water, in line with the saying "constant dripping wears the stone". Based on the psyche-brain-organ relation, osteoporosis in postmenopausal women has nothing to do with a reduced estrogen production or a calcium-low diet but rather with a woman's attitude towards aging and the changes that come with menopause (feeling less attractive, feeling no longer needed, a low libido). In societies where women age naturally and without the Western "anti-aging" hype, older women don't get osteoporosis. It goes without saying that the osteoporosis diagnosis and the fear of a "crippling disease" contributes to additional self-devaluation conflicts leading to a chronic condition. This is why we have to learn GNM early!

If someone has already a cancer, the loss of bone tissue is usually diagnosed as an "osteolytic bone cancer" or "bone metastasis", even though there is no tumor growth (compare with bone cancer in the healing phase). In the majority of cases the self-devaluation conflict is triggered by the diagnosis of the first cancer, a negative prognosis ("the cancer is incurable"), or the debilitating side effects of cancer treatments (surgery, radiation and chemotherapy). This is why bone cancer is next to lung cancer the most frequent secondary cancer. Typically, the "bone cancer" develops close to the site of the primary cancer ("now I am useless there!"), thus, in the sternum and/or ribs with breast cancer or in the lower back with prostate cancer.



On this CT scan we see the impact of a self-devaluation conflict in the brain relay for the lumbar spine (view the GNM diagram). The sharp border of the Hamer Focus reveals that the person is in the conflict-active phase.



This remarkable organ CT showing a Hamer Focus in the area of the fourth lumbar spine (active self-devaluation conflict) makes the communication between the brain and the corresponding organ (here the spine) strikingly visible.

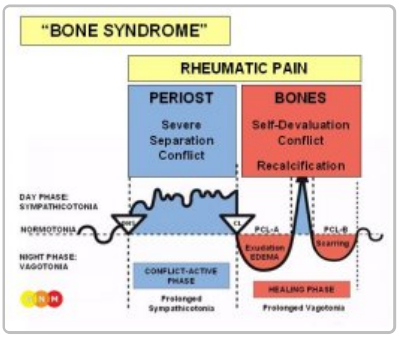
If the **tendons or ligaments** are affected by a self-devaluation conflict, the cell loss presents as **soft tissue necrosis** with an increased risk of injury since the weak tissue ruptures easily. This happens with an **Achilles tendon tear**, which originates in a heel-related self-devaluation conflict. Prolonged loss of cartilage, for example in the knee or hip, is called **arthrosis**, also known as **osteoarthritis** (not to be confused with arthritis that occurs when a joint is healing).

HEALING PHASE: In the healing phase, the **bone is reconstructed with callus** produced by bone-building osteoblasts (see also tooth repair with odontoblasts). The soft, new bone substance eventually hardens into a hard callus. In standard medical practice, however, the soft callus is often mistaken for pus and subsequently removed with the effect that the holes in the bone (osteolysis) remain.

If available, bacteria assist the reconstruction of the bone. **Staphylococcus bacteria** are specialized in restoring bone tissue. This is why surgeons who operate on fractures commonly find a "staph infection" in the area not realizing that these bacteria are vital for bone healing (see Methicillin-resistant Staphylococcus aureus in hospitals). If the helpful bacteria are not present at the time because they were eradicated through antibiotics, healing still occurs but not to the biological optimum.

> **NOTE:** Tubercular secretion originating in the corium skin (following an "attack conflict", including a hit or fall) can leak into the healing bone. This is erroneously called **bone tuberculosis**.

Conflict-related bone fracture: If a fracture was accompanied by a self-devaluation conflict (typical for athletes) this generates bone osteolyses at the fractured site (termed **Sudeck's atrophy**). The same might happen after orthopedic surgery associated with a self-devaluation (not being able to do physical work or sports). As a result of the decalcification the fracture cannot heal properly. According to Dr. Hamer, it is of utmost importance not to perform an exploratory puncture in order to prevent the development of an osteosarcoma.



When a bone heals, the swelling expands the periosteal layer covering the bone. The stretching of the periosteum causes considerable **bone pain** since the periosteum is endowed with highly sensitive nerves. The pain is similar to the **rheumatic pain** that involves the upper layer of the periosteum and occurs in the conflict-active phase of a severe separation conflict. Commonly, the condition is referred to as **rheumatoid arthritis** (compare with acute joint rheumatism). Water retention exacerbates the pain.

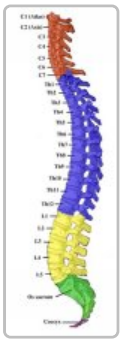
In GNM we call the combination of the two Biological Special Programs the "**Bone Syndrome**".

What is more, when the periosteum lifts from the bone, the bone loses its support and breaks easily. Unless the bone osteolysis is severe, during the conflict-active phase there is no real risk of fracture since the periosteum still covers the bone tightly. **Bone pain** is a necessary part of healing, because it forces the person to rest in order to prevent a spontaneous fracture, for example, of the femoral neck. If the spine is involved, Dr. Hamer strongly advises that the patient stay in bed in order not to put stress on the spine and possibly break a vertebra resulting in paraplegia. The pain associated with a healing bone can take several months, even longer with conflict relapses. The better a person is prepared for the pain the easier it will be to endure the *temporary* discomfort. Recognizing that the pain is a sign of healing can prevent new self-devaluation conflicts triggered by the pain itself.

> **NOTE:** A lack of movement or one-sided activities putting constant strain on a specific part of the body generates musculoskeletal pain *without* a biological conflict. However, even though the problems are unrelated to a DHS, the pain can prompt a self-devaluation conflict ("my back is finished") resulting in a chronic condition. The same holds true for injuries and physical traumas.

A **herniated disc**, commonly called a "slipped disc" or **disc protrusion**, develops when the swelling tears the outer ring (anulus fibrosus) of an intervertebral disc with parts of the gel-like central portion (nucleus pulpous) bulging into the vertebral canal. The pressure on the spinal nerve causes acute pain, for example in the lower back (**lumbago**). With water retention due to the SYNDROME the pain is even more severe since the retained water increases the swelling. Muscle spasms in the surrounding area are caused by "not being able to move" due to the pain in the lower back. **NOTE:** When the periosteum stretches during the healing of a vertebra this might look, roentgenologically, like a protrusion of the disk.

If the cervical spine (intellectual self-devaluation conflict) is affected, the pain radiates from the neck down to the shoulders, arms and fingers. **Sciatica** occurs when the swelling of a lumbar disc (central self-devaluation conflict) presses onto the sciatic nerve. Recurring sciatica is brought on by conflict relapses. Constant pressure on a spinal nerve (hanging healing) can lead to serious nerve damage resulting in a loss of sensation in the lower extremities (compare with sensory paralysis related to the periosteum). In this case, preventive surgery must be considered.



Swelling in the region of the plexus sacralis, formed by the fourth and fifth lumbar nerves (L 4 and L5) and the first, second, and third sacral nerves causes pulling on the *back* side of the leg.

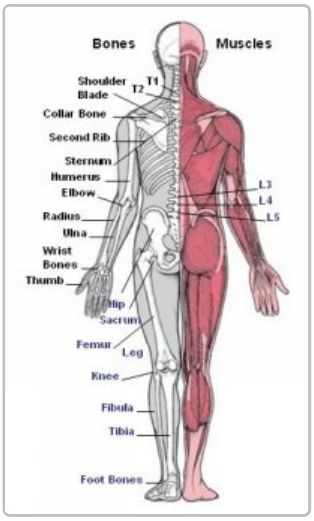
Swelling in the region of the lumbar plexus, formed by the first four lumbar nerves (L 1 – L 4) and the last thoracic nerve (T 12) causes pulling on the *front* side of the leg and in the groin.

NOTE: A localized self-devaluation conflict involving the testicles (testicular cancer diagnosis, removal of a testicle) affects the second lumbar nerve (L 2), because before the testicles moved into the testicular sac they were located just in front of the second lumbar vertebra.

A so-called **sequestered disc** is a fragment of the disk's nucleus that is no longer attached to the disc. This happens when the healing disk ruptures, for example, through lifting something heavy.

With a hanging healing, that is, when the healing process is constantly interrupted by conflict relapses, the recurring recalcification eventually leads to a deformation of the spine. presenting as **scoliosis** (lateral or sideways curvature), **lordosis** (exaggerated forward curvature of the lower spine), or **kyphosis** (backward rounding of the upper spine, commonly called hunchback). Juvenile kyphosis is termed **Scheuermann's disease**. Even though the distortion of the spine is not reversible, with the understanding and knowledge of GNM it can be stopped from further progression.

Spondylosis involves the vertebral discs, for example, the lumbar spine as a result of continual conflict relapses of a central self-devaluation conflict. If it affects the neck area (linked to an intellectual self-devaluation conflict) this results in **cervical spondylosis** (compare with a stiff neck and torticollis related to the neck muscles). **Spondylitis** occurs when the healing process is accompanied by an inflammation.



ARM SEGMENT: The musculoskeletal segment of the arm, including the thumb, wrist bones, radius and ulna, elbow, humerus, collar bone, shoulder blade, upper part of the sternum as well as the second rib and second and third thoracic vertebrae (T 1 and T2) are a functional unit.

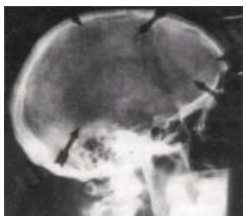
LEG SEGMENT: The musculoskeletal segment of the leg, including the foot bones (ankle, heel bone, toe bones), fibula and tibia, knee, femur and femoral neck, hip and sacrum as well as the third, fourth, and fifth lumbar vertebrae (L 3, 4, 5) are a functional unit.

In case of a self-devaluation conflict, the muscle necrosis or osteolysis might take place in the entire segment. The corresponding Hamer Focus in the cerebral medulla reaches either over the whole segment or shows single foci. Accordingly, healing (recalcification of the bone with swelling or muscle pain) occurs either in the whole segment at once or successively.

The arm and leg segments are supplied by the spinal cord (see Embryonic Development).

When the skull bone (intellectual self-devaluation conflict) is healing, a big swelling might press onto the dura mater (outer meninges) resulting in meningitis. With the SYNDROME, that is, with water retention as a result of an active abandonment and existence conflict, the swelling can become quite large. The condition causes severe headaches, particularly during PCL-A. Evidently, meningitis does not occur when the swelling (edema) is located on the outer surface of the skull.

This X-ray shows bone osteolyses (visible as dark) in several areas of the skull, indicating conflict activity with an intellectual self-devaluation conflict or "This is not fair!"-conflict. In early childhood the condition is called **rickets** (weak bones). Rickets can also affect the arm, legs, spine, or the entire skeletal system (generalized self-devaluation conflict). The



theory that rickets is caused by a vitamin D deficiency is pure assumption.

Pain of the facial bones, linked to a self-devaluation conflict associated with the face (for example, concerning one's look or reputation), presents as **trigeminal neuralgia** since the face is innervated by the trigeminal nerve (see also trigeminal neuralgia related to the periosteum and to the facial skin).

A **heel spur**, a small bony growth on the underside or back side of the heel develops after the related self-devaluation conflict has been resolved. The pain subsides with the completion of the healing phase, provided there are no conflict relapses. The bone spur, however, remains. If the self-devaluation conflict affects the joint at the base of the big toe (MTP-metatarsophalangeal joint), the growth on the foot creates a deformity of the great toe, called a **hallux valgus or bunion**. Pain in the heel or at the bottom of the foot could also be the result of a self-devaluation conflict involving the plantar fascia, the ligament that connects the heel bone to the toes. The inflammation, known as **plantar fasciitis**, occurs during the healing phase.

When a long bone such as a bone in the arms or legs recalcifies, a hole is left in a certain area to allow the fluid of the edema to drain off. In the **leg** the fluid creates a temporary **peripheral edema** (see also peripheral edema related to the leg veins or the myocardium).

Arthritis is the healing of a joint (hip, knee, shoulder, elbow, finger) accompanied by an inflammation. What is termed **acute joint rheumatism** is the condition when the fluid in the edema, usually in big joints such as the knee or shoulder, pushes through the cartilage into the joint causing a transudative effusion (see also transudative effusion with fluid entering the pleura or the pericardium from adjacent ribs or the sternum; compare with rheumatism related to the periosteum). This is usually the case with water retention due to the SYNDROME. Conflict relapses also increase the swelling! As a result, the joint becomes red, hot, and very swollen. If such a swollen joint is punctured for exploratory purposes, this can create a large osteosarcoma. Swelling outside of the periosteum also occurs when the fluid of the bone edema leaks through the membrane of the periosteum. If this happens in the groin or in the area of the top of the femur, the swelling is often misdiagnosed as a thrombosis.

Chronic arthritis is a sign that the healing process cannot be complete because of constant conflict relapses. With arthritis a person is quickly in a vicious cycle since the arthritic pain (pain track) and the restriction of movements often causes additional self-devaluation conflict at the same location. Sooner or later, this "freezes" a joint, for example, the shoulder. **Polyarthritis** affecting "many" joints reveals that the person had suffered the self-devaluation conflict as a whole (generalized self-devaluation conflict).

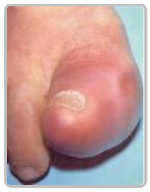
The continuous alteration between decalcification (conflict-active phase) and recalcification (healing phase) eventually deforms the finger joints. Continuous conflict relapses worsen the deformation because of the buildup of more and more bone tissue (hardended callus) at the site.

So-called **Carpel Tunnel Syndrome** occurs when the swelling of bones, ligaments, or tendons narrows the carpal tunnel, the passageway between the wrist and the hands, causing the median nerve, which reaches from the forearm into the palm of the hand, to become compressed. Hence, the typical symptoms of tingling, numbness, and sharp, piercing nerve pain running from the wrist up to the entire arm. Based on GNM, the condition is not, as suggested, the result of "wear and tear" (typists and dental hygienists are the professional groups with the highest incidents of CTS) but rather of a self-devaluation conflict associated with the hand(s).

Wrist tendonitis develops after a dexterity conflict has been resolved. **Achilles tendonitis** reveals that the self-devaluation conflict was associated with the foot. Tendonitis affecting the elbow relates typically to sports activity such as tennis (having played a bad game), hence, the term **"tennis elbow"** (**epicondylitis**). **Bursitis** is an inflammation of the bursae, the cushions between a bone and the surrounding soft tissue. It usually occurs close to joints such the elbow, knee, hip or shoulder, depending on the specific self-devaluation conflict.

With water retention due to the SYNDROME involving the kidney collecting tubules arthritis becomes **gout**. The elevated uric acid level gives rise to the belief that a vegetarian or low-purine diet would alleviate the pain. From the GNM point of view, it is rather the underlying abandonment and existence conflict that has to be addressed! Gout in the joint at the base of the big toe is commonly associated with excess alcohol consumption; although, not every heavy drinker has gout! If, however, the intoxicated condition triggers a conflict of "not being able to walk or not being able to balance", the development of gout is preprogrammed; whether it affects the right or left toe is determined by a person's handedness and to whom the self-devaluation conflict relates – to the mother, the partner, the children?

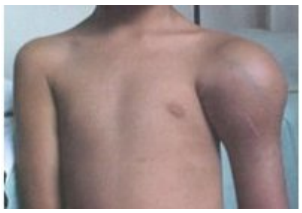
An inflammation of the gout nodules causes acute pain, particularly during the "gout attack" that occurs during the Epileptoid Crisis.



BONE CANCER AND OSTEOSARCOMA

Under normal circumstances, when a bone or joint heals callus also accumulates outside the bone, to be precise, underneath the protecting shield of the periosteum. The callus-buildup (showing on an X-ray as white) forms a temporary, natural cuff around the bone to stabilize the affected bone section while healing runs its course. Yet, in conventional medicine the callus "growth" is considered a **bone cancer** (compare with "bone cancer" in the conflict-active phase). A "tumor" in the femur, pelvis, humerus, or ribs is generally classified as **Ewing's sarcoma**.

ATTENTION: If the periosteum seam ruptures because of an injury (accident, fall, bone fracture) or an **exploratory puncture** (biopsy), the callus finds its way through the open periosteum into the surrounding tissue creating a large **osteosarcoma** (compare with muscle sarcoma and connective tissue sarcoma). In conventional medicine an osteosarcoma is considered a "malignant" type of bone cancer with a poor prognosis. Without a puncture, the surrounding tissue would just have swollen somewhat since only the fluid would flow out of the edema but not the callus. The process would have been similar to acute joint rheumatism that has a remission after a certain amount of time. With the understanding of GNM exploratory excisions become entirely unnecessary. Our experience shows that a brain CT scan provides much more reliable information about histological formations than any biopsy.



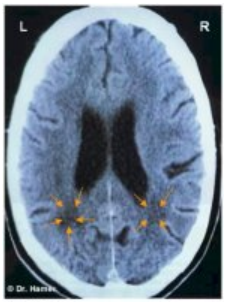
Osteosarcoma in the left shoulder

In addition to creating an artificial osteosarcoma, the outflow of callus into the neighboring tissue leads to a decalcification and eventually dissolution of the affected bone. In case of an osteosarcoma around the knee, this usually results in an amputation of the leg.

> **NOTE:** As long as the healing phase persists, after an **amputation** the bone pain continues as a **phantom limb pain** just as if the bone were still in place (see leg segment). This implies that the amputee has also leukemia until healing on the emotional and cerebral level is complete. Phantom pains also occur with every conflict relapse! The same applies to rheumatic phantom pain with prolonged conflict activity of a severe separation conflict related to the periosteum.

With a puncture of the ribcage the callus might escape into the breast. The self-devaluation related to the ribs is usually caused by a breast cancer diagnosis. If hardened callus is found in the breast (as a consequence of the rib puncture!) it is usually diagnosed as a "metastatic breast cancer", although the growth (in reality an artificial osteosarcoma) is not even adhered to breast tissue. A mastectomy followed by chemo treatments are the standard "therapies". For women unfamiliar with GNM, further self-devaluation conflicts are just a matter of time.

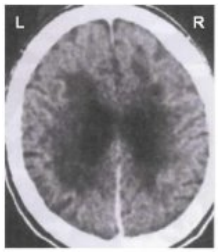
A **mediastinal osteosarcoma** develops when callus leaks out of a thoracic vertebra into the mediastinum. This is particularly dangerous since the hardened callus can compress the heart (compare with pericardial tamponade), the trachea, the lungs, or veins that supply the mediastinum with blood. Callus found close to the bronchia is often diagnosed as a "small cell bronchial carcinoma". In reality, the "small cells" are callus! Dr. Hamer advises to surgically remove the callus from the mediastinum to prevent complications



Parallel to the healing bone or joint (localized self-devaluation conflict) a brain edema develops in the cerebral medulla (in PCL-A) showing on a brain CT as dark (hypodense).

In this example, the edemas are located on the right and left side of the cerebral medulla (view the GNM diagram). They reveal that the person associated the conflict of "not being able to endure a situation" with his/her partner and children, manifesting as pain in both hips.

Overall **cerebral swelling** of the cerebral medulla, as seen in this image on a higher CT section, typically happens with a generalized self-devaluation conflict. The swelling causes severe headaches.



NOTE: A large edema might compress the lateral ventricles (see hydrocephalus). In extreme cases, a big swelling can lead to a brain coma. This usually only occurs with acute water retention (the SYNDROME) as a result of an active abandonment and existence conflict (hospitalization). Intravenous infusions contribute to the water retention!

The Epileptoid Crisis is the period when the brain edema as well as the edema around the healing bone or joint is expelled. This reduces both the swelling and the pain. The Epi-Crisis presents as the "cold days" with chills, cold perspiration, and feeling uneasy.

At the end of the healing phase, the bone is completely restored.

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

ANEMIA AND LEUKEMIA

Blood is made up of blood cells, blood plasma, and blood serum. It circulates through the heart, arteries and veins, which jointly comprise the circulatory system. The main function of the blood is to transport oxygen, carbon dioxide, nutrients, metabolic wastes, hormones, and other elements to and from the body's cells. **Red blood cells (erythrocytes)** are filled with hemoglobin, an oxygen binding iron-containing pigment responsible for delivering oxygen into all parts of the body. **Platelets (thrombocytes)** are involved in blood clotting mechanisms at the site of wounds. **Plasma and serum** are the liquid parts of the blood; plasma contains blood clotting factors as well. **White blood cells (leukocytes)** are believed to be part of the body's immune system, envisioned by conventional medicine as a defense system against "disease-causing" agents. In reality, white blood cells (including phagocytes and lymphocytes) play an important role during the healing phase by removing the by-products of the microbial repair work. Hence, they are part of an innate *support* system designed to assist the healing process.

The production of blood cells (hematopoiesis) takes place in the **bone marrow** inside the bones. Bone marrow contains blood-forming stem cells that give rise to all blood cells. Like the bones from where they originate, the blood cells derive from the new mesoderm. Technically, blood is a highly specialized vascular tissue, hence, its mesodermal affinity also to the blood vessels.

> **NOTE:** According to the standard view, during the fetal development, the liver and the spleen are the sites of the formation of blood cells, which would be later replaced by the bone marrow. Based on this theory, it is assumed that the liver and spleen takes over the blood production in the event that the bone marrow is not able to produce blood. Dr. Hamer: "To me this seems incorrect in some respects. As far as blood production is concerned, the first part of pregnancy shows the production of "fetal erythrocytes", which originate from the endoderm (the first and oldest embryonic germ layer). However, these are not identical with the mesodermal erythrocytes that develop later during gestation. It is highly unlikely that the liver would resume the original fetal function from the first weeks of the embryonic phase. If that were the case, we would see completely different kind of erys, namely "fetal erythrocytes." - Dr. med. Ryke Geerd Hamer, *Vermächtnis einer Neuen Medizin* (Legacy of a New Medicine), Vol 1, p. 477.

CONFLICT-ACTIVE PHASE: The bone tissue loss (osteolysis) that takes place during the conflict-active phase of a self-devaluation conflict also involves the bone marrow, resulting in **anemia** (low red blood cell count), **leucopenia** (low white blood cell count), and **thrombocytopenia** (low platelet count). During conflict activity, the hemoglobin (Hb) and hematocrit (Hct) values are also low (the hematocrit is the quotient of the erythrocyte volume over the total blood serum). The loss of bone marrow (**panmyelophthisis**) has an effect on the whole blood cell production system, even if the DHS affects only a particular site (localized self-devaluation conflict). The reason for this is most likely that in newborns all bones still have an active marrow (adult bone marrow is found only in the flat bones).

Because of the decreased number of platelets there is a **tendency to bruise and bleed more easily** (see also thrombocytopenia related to the spleen). Internal bleeding, for example, bleeding stomach ulcers, intestinal bleeding, or uterine bleeding that occur in the healing phase of the corresponding conflict could lead to serious complications with a concurrent self-devaluation conflict, which is oftentimes triggered by the diagnosis (colon cancer, uterus cancer). **CAUTION:** Without a sufficient knowledge of GNM, rushing into "clearing" conflicts as it is practiced by some alternative modalities could have grave consequences.

HEALING PHASE: In the healing phase, the restoration of the bone marrow occurs parallel to the reconstruction of the bone. The resumption of the blood cell production (hematopoiesis) proceeds in four phases:

PHASE 1: still anemia, leucopenia, and thrombocytopenia

For the first three weeks, the blood values are still low. At this point, however, the low blood cell count is deceiving because the expansion of the blood vessels during vagotonia enlarges the vessels up to five times of its normal size (in sympathicotonia the blood vessels are constricted). The extra volume is filled with blood serum. As a result, the blood cell count per cubic millimeter (erythrocytes, leucocytes, thrombocytes) *appears* low although, in reality, the

absolute number of red and white blood cells has not changed. The same can be said for the hemoglobin and hematocrit level as well as for the platelet count. In addition to the fatigue characteristic for *any* healing phase, anemia causes extreme tiredness (in the conflict-active phase, the sympathicotonic state of stress still counteracts the fatigue to some extent).

In conventional medicine terms, this stage is called "**a-leukemic leukemia**", meaning that leucoblasts are not (yet) found in the peripheral blood ("a-leukemic") but are already found in large numbers in the bone marrow (detected through puncture of the bone marrow!)

PHASE 2: still anemia and thrombocytopenia but rise of leucoblasts

After three to six weeks into the healing phase, the bone marrow starts to produce large amount of leucoblasts. Leucoblasts are specialized leucocytes. Their main function is to support the repair of the bone that is currently under way. It should be noted that the count of normal leucocytes, which assist the bacterial work in the healing phase, are not affected by the increase in the number of blasts. Once the leucoblasts have done their job, they are reabsorbed by the organism and replaced by new ones until the production of normal cells is back in full swing. Those leucoblasts that cannot be broken down in the liver are left in the peripheral blood where they are found through a blood test. Since leucoblasts differ from leucocytes, conventional medicine considers them as "immature" and as "cancerous" (cancer of the blood), even though they don't show cell division (mitosis) which is the required criterion of cancer cells.

It is the high count of leucoblasts that is diagnosed as **LEUKEMIA**. Because of the extreme fatigue due to the ongoing anemia, it is in this phase that most of the leukemia cases are detected. Based on the knowledge of GNM, the overproduction of leucoblasts is a positive sign that the self-devaluation conflict has been resolved and the bone, including the bone marrow, is now healing. Hence, the higher the leucoblast count the better! In Phase 2, the production of erythrocytes (red blood cells) has also started but their number is only noticeable later in the process. Because of the low thrombocytes count (thrombopenia) there is still a risk of easy bleeding!

> **NOTE:** Radioactive exposure as a consequence of nuclear bombing (Hiroshima, Nagasaki) or the release of radioactive material through nuclear accidents (Chernobyl, 1986) damages the bone marrow with the development of leukemia during the repair phase (without a brain edema, unless the tragedy prompts a self-devaluation conflict). Medical radiation as well as chemo treatments also destroys the bone marrow! This is most detrimental if a bone is healing since, in addition to the restoration of the bone, the bone marrow has to overcome the damage caused by the radiation "therapy" and the chemical poisoning.

The extent of the leukemic stage is determined by the duration and intensity of the conflict-active phase. "Chronic leukemia", referred to as "slow growing leukemia", implies, in GNM terms, that the healing phase is continuously interrupted by conflict relapses. "Acute leukemia", referred to as "fast growing leukemia", indicates an intense first-time leukemic healing process, usually caused by a highly dramatic self-devaluation conflict.

In conventional medicine, the different types of leukemia are classified according to the blood stem cells that are involved, hence, the use of terms such as "monocytic leukemia", "T-cell leukemia", "thrombocyte leukemia", "erythroleukemia", "lymphoblastic leukemia", "myelogenous leukemia", "plasmacytoma", and so forth.

A **plasmacytoma** or **multiple myeloma** is a growth of plasma cells (white blood cells) that originates in the bone marrow. The bone marrow necrosis (panmyelophthisis) takes place in the conflict-active phase. With an inflammation and the participation of bacteria (if available), the condition is called **osteomyelitis**. The fluid emitted from the edema in the bone marrow stretches the periosteum causing considerable pain. Plasmacytomas typically develop in flat bones such as the hip bone, sternum, spinal vertebrae, skull, or ribs. This confirms that the condition is linked to a self-devaluation conflict.

> **NOTE:** A **bone marrow transplant** is a procedure where the bone marrow of a leukemia or lymphoma patient is replaced with "healthy" bone marrow stem cells from a donor. Before the treatment, high-dose chemotherapy, radiation, or both are given to eliminate *all* bone marrow. Subsequently, the harvested stem cells are injected into the circulation on the assumption that they will travel to the bone marrow where they settle and begin producing "normal leukocytes". Radioactive marking of the donor's marrow, however, has shown that within a few weeks there is no foreign marrow left in the recipient's body. It has all been annihilated as result of a natural reaction to the foreign cells. If the bone marrow does start the blood cell production, it is only due to the fact that the dose of radiation and chemo treatments has not destroyed the entire bone marrow, allowing the remaining stem cells to eventually produce new blood cells.

"**Lymphoblastic leukemia**", which is closely associated with the lymphatic system, is usually caused by a self-devaluation conflict of a lesser degree. Lymphatic leukemia occurs more common in children as a result of a generalized self-devaluation conflict.

> **NOTE:** **Lymphocytes** are white blood cells that derive from stem cells in the bone marrow. They are not, as assumed, produced *in* the lymph nodes but migrate from the bone marrow via the lymph fluid to the lymph nodes, where they play an important role in removing the remnants of the microbial repair work in any given healing phase (contrary to the immune system theory). Since the lymphocytes make up lymphoid tissue, the lymphocyte count is elevated in case of a lymphoma (Hodgkin's disease). With lymphatic leukemia, however, only the count of lymphoblast increases - *without* the swelling of a lymph node, unless the two Biological Special Programs run simultaneously.

The various types of leukemia can occur simultaneously or change from one type to another, particularly with additional self-devaluation conflicts that are often triggered by the leukemia diagnosis itself. From a GNM perspective, all types of leukemia are good news, since it confirms that the self-devaluation conflict has been resolved and healing

is now under way. Essentially, every condition that occurs in the healing phase of a bone or joint, whether it is arthritis, lumbago (pain in the lower back), or a tennis elbow is accompanied by a small leukemia. Dr. Hamer: "If conventional doctors were to diagnose more accurately, they would have to decimate the entire sports world with chemotherapy!"

PHASE 3: rise of erythroblasts and thromboblasts

At the end of the leukemic phase, shortly after the Epileptoid Crisis, the production of red blood cells also starts to pick up. However, a large number of the new blood cells (called erythroblasts or normoblasts) are still rejects and functionally unusable as oxygen carriers. At that point, at least for a short period of time, the production of erythroblasts and leucoblasts occurs together. Hematologists view this combination as a double threat, named **"erythroleukemia"**.

In Phase 3 the platelet production begins as well. Like the erythroblasts, the first new platelets (called thromboblasts) are still functionally deficient and have no blood clotting ability. However, in conventional medicine the elevated count of thromboblasts is considered a "blood disorder", termed **"thrombocyte leukemia"** (compare with thrombocytosis, an increased level of thrombocytes, related to the spleen).

PHASE 4: production of normal leucocytes, erythrocytes, and thrombocytes

During the last part of the healing phase the blood values return to normal, notably both in the peripheral blood as well as in the bone marrow. This is particularly important for thrombocytes and their blood clotting ability.

> **NOTE:** Iron is an essential element for blood production. With the rapid production of erythrocytes, the body requires far more iron than usual. This leads easily to **iron deficiency**. In this case, the lack of iron is unrelated to blood loss due to heavy bleeding (gastrointestinal bleeding, heavy and long menstrual periods). An elevated iron level, called **hemochromatosis**, occurs when the production of red blood cells is suppressed (see conflict-active phase) and the iron available from food can therefore be used for blood production. Over time, the extra iron is stored in various organs, particularly in the liver.