

"DIABETIC FOOT SYNDROM"

General recommendations for SCENAR procedures in case of complaints

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The main symptoms – decreased sensitivity, hypothermia, soreness of the lower extremities - arise from disturbances in nerve conduction, a decrease in the intensity of the blood flow and a deterioration in the nutrition of the legs.

It is possible to restore the nutrition of the foot with the help of SCENAR therapy. SCENAR helps the patient's body to change the rheological properties of blood, normalize the blood flow, improve the membrane permeability of cells, and provide them with adequate nutrition. Together with the nutrition of the cells, blood flow and nutrition of the vessels themselves improve. At the same time, trophic ulcers are tightened, even old, weeping ulcers dry up, peeling of the skin decreases, and it becomes easier for the legs. A significant improvement in the venous outflow from the center of the inflammation ensures the fastest "flushing" of toxins from the intercellular space and cells of the affected tissues. This improves the blood flow and nutrition of the lower extremities, and it becomes possible to resist the development of a diabetic foot.

The patient's symptoms may be dominated by complaints of either neurological disorders (diabetic neuropathy) or vascular disorders (diabetic angiopathy).

- **Diabetic neuropathy** - manifests by impaired sensitivity (paresthesia, in the form of "pins and needles", numbness of the extremities, cramps), characterized by disorders of the somatic and / or autonomic nervous system (impaired nerve conduction, sensitivity, movement disorders: muscle weakness, "sagging" of the foot).
- **Diabetic angiopathy** - manifests by damage to the walls of both small vessels, capillaries (diabetic microangiopathy) and large vessels (diabetic macroangiopathy). In the areas of the body that are associated with the affected vessels, the blood supply is disrupted and the tissues begin to feel a lack of oxygen. Coldness, pallor and cyanosis of the extremities, numbness of the fingers, and then of the entire foot appear. Due to the tissue nutritional disorders, trophic ulcers may appear. There is constant pain in the lower extremities, intermittent claudication. Swelling of the legs may accompany the constant pain, leg cramps may appear.

The algorithm for designing of each procedure is determined after the patient's SURVEY, before EACH procedure. The purpose of the survey is to identify the presence, location and nature of an active COMPLAINT ("*here and now*"). We always start the SCENAR procedure by working on the patient's active complaint today.

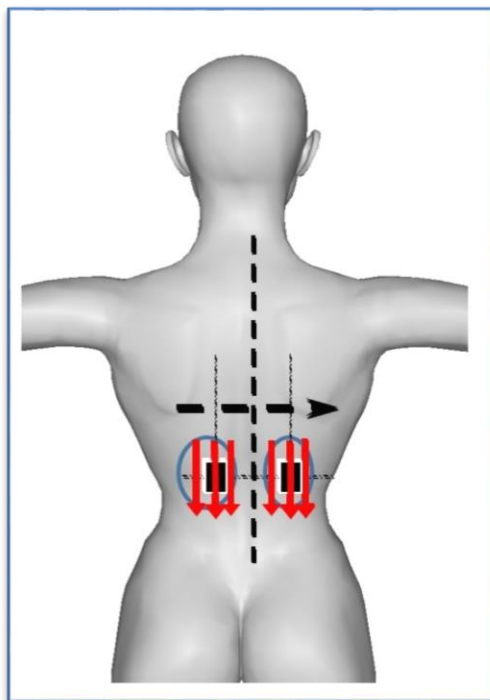
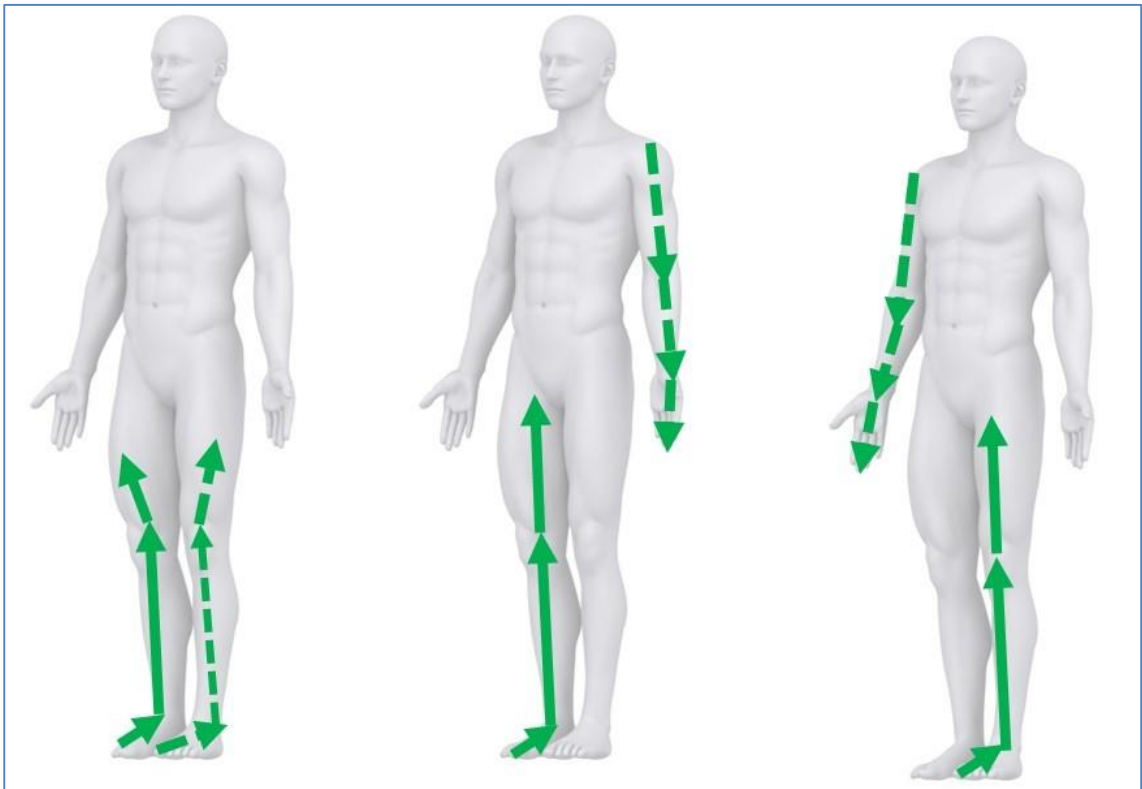
Recommended treatment zones for the predominance of symptoms of

Diabetic polyneuropathy on the lower extremities:

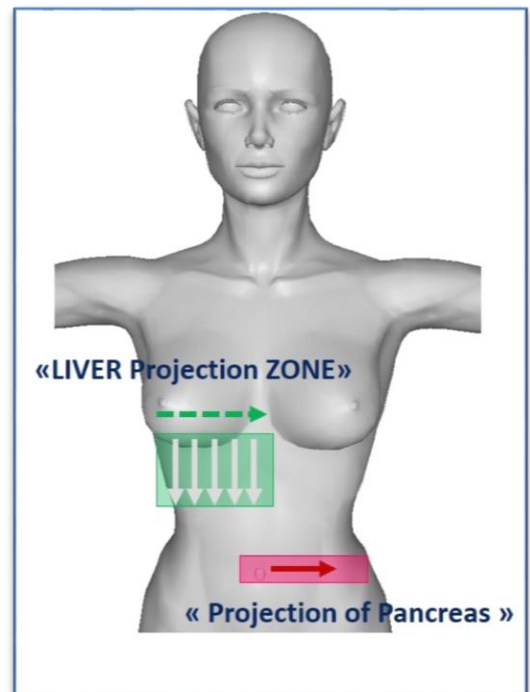
1. Main treatment zones:

- Lower extremities (start the treatment with a healthier leg according to sensations or functions. Both lower extremities are treated from the tips of the toes to the groin folds or, minimally, up to mid-thigh).
- Lumbar and Sacral Zone.
- Reciprocal extremities (completely treat the leg and the opposite arm according to the principles of "left-right" and "right-left", "from toes to fingers").

Reciprocal extremities



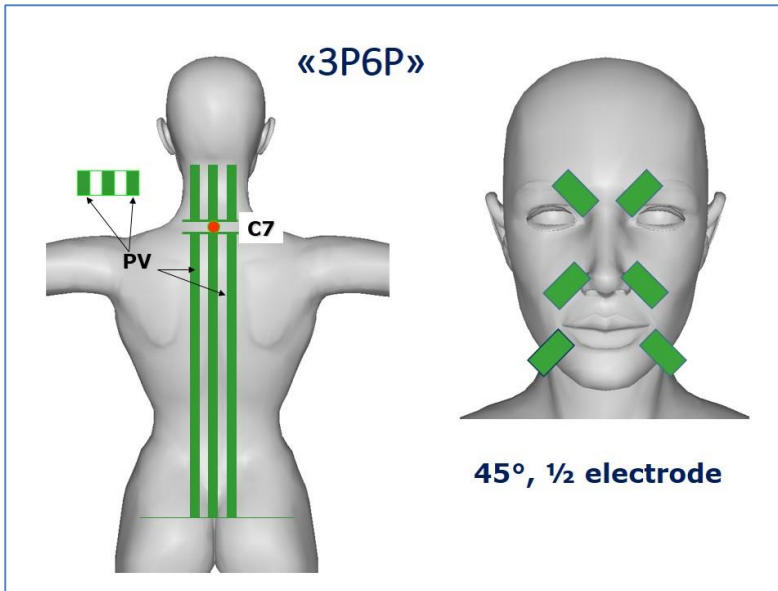
- Projection of the kidneys.



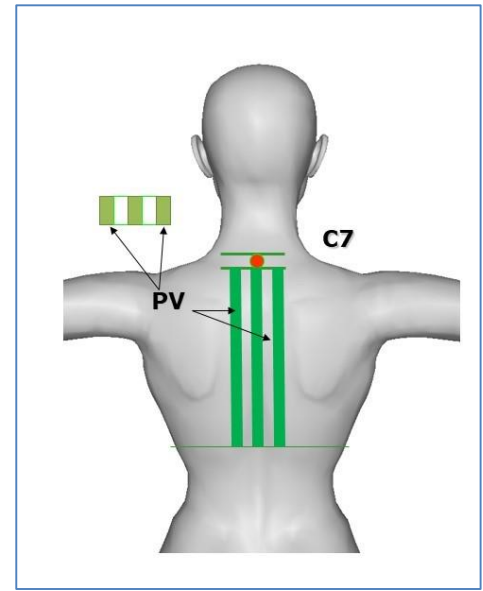
Anterior projection of the liver. Anterior projection of the pancreas (epigastric zone)

2. Additional treatment zones:

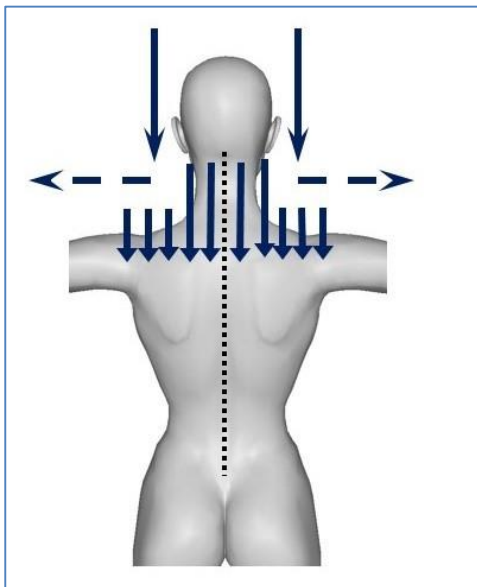
- Collar Zone.
- Anterior projection of the pancreas (epigastric zone).
- Anterior projection of the liver.
- Projection of the kidneys.
- General zones: "3P6P", etc.



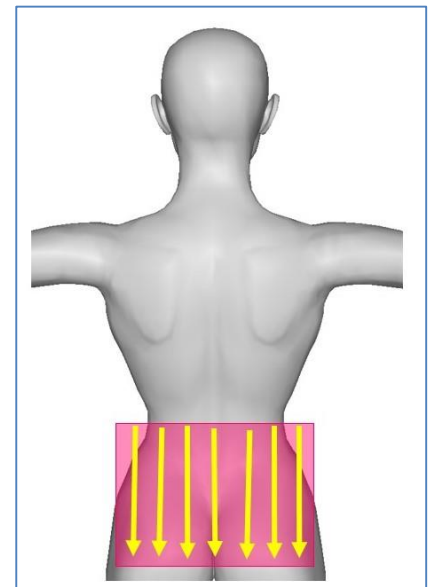
General zones: "3P6P"



Projection of the thoracic spine and paravertebrals at this level.



- Collar Zone.



- Lumbar and Sacrum Area.

***Recommended treatment zones for the predominance of symptoms of
Diabetic angiopathy on the lower extremities:***

1. For an active local complaint with clear boundaries:

1.1. The main treatment zones:

- A local zone of the Active complaint (including the projection of a trophic ulcer) - the treatment zone on the skin is one electrode wider than the projection of the boundaries of the complaint itself along the perimeter.
- Symmetrical or reciprocal zone – is treated during the procedure in addition/a pair to the zone of active complaint.
- Lower extremities (start treatment from a healthier leg according to sensations or functions. Both lower limbs are treated from the tips of the toes to the groin folds or, at least to mid-thigh).
- Lumbar and Sacrum Area.
- Projection of the thoracic spine and paravertebrals at this level.

1.2. Additional treatment zones:

- Projection zone of a trophic ulcer, if it is not an active complaint during the procedure.
- Projection zones of itching (in the presence of such complaints).
- Reciprocal extremities (completely treat the leg and the opposite arm according to the principles of "left-right" and "right-left", "from toes to fingers").
- Collar Zone.
- Anterior projection of the pancreas (epigastric zone).
- Anterior projection of the liver.
- Projection of the kidneys.
- Projection of the points for determining the pulsation of arteries on the lower extremities, especially when this pulsation is decreased or absent (treat in D-0 for 1-2 minutes on each point).
- General zones: "3P6P", etc.



Dorsalis pedis pulse

Lightly touch the medial dorsum of the foot while the patient points the toes down. In this site, the pulse is difficult to palpate and may seem to be absent in some healthy patients



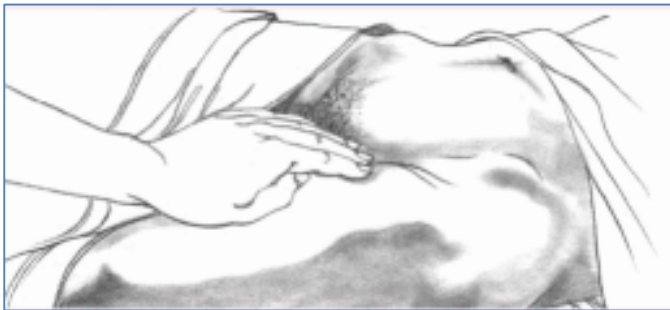
Posterior tibial pulse

Curve your fingers around the medial malleolus, and feel the pulse in the groove between the Achilles' tendon and the malleolus



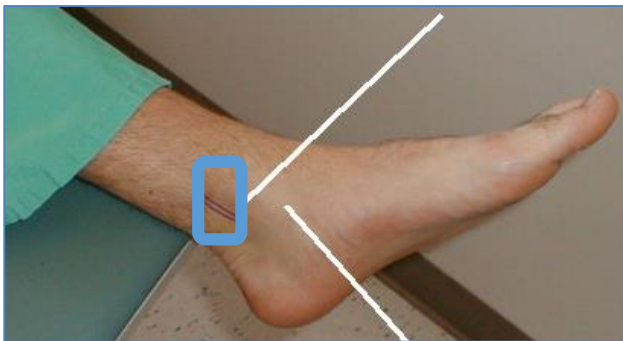
Popliteal pulse

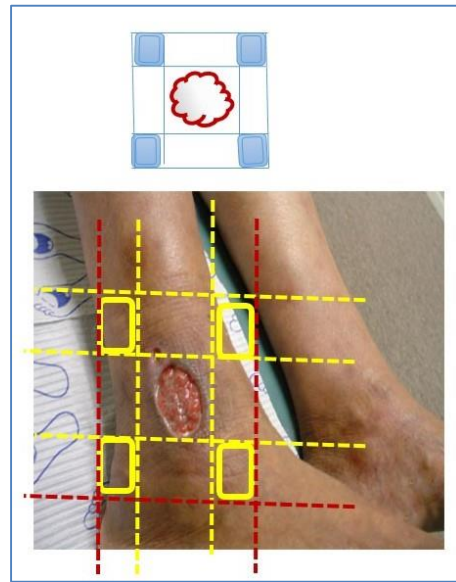
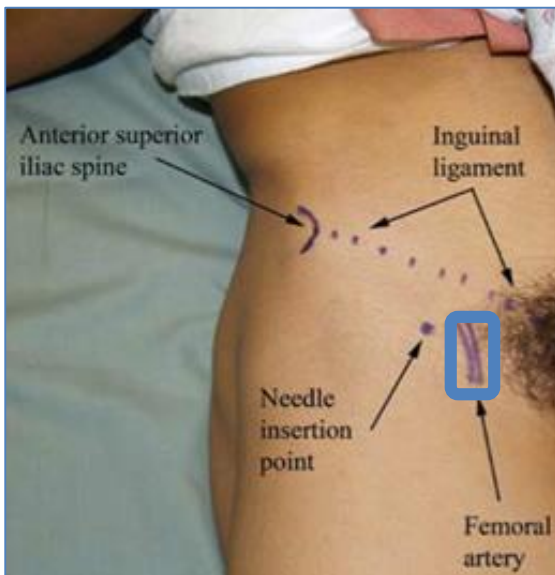
This artery is found behind the knee and comes off of the femoral artery. It is a rather deep artery like the femoral. To find the artery, the knee should be flexed. It is located near the middle of the popliteal fossa, which is a diamond-shaped pitted area behind the knee. Use two hands to palpate the artery...one hand assisting to flex the knee and the other to palpate the artery



Femoral pulse

Press relatively hard at a point inferior to the inguinal ligament. For an obese patient, palpate in the crease of the groin, halfway between the pubic bone and the hip bone.





2. In case of a complaint without a clear projection of its boundaries on the skin:

2.1. Main treatment zones:

- Lower extremities (start treatment from a healthier leg according to sensations or functions. Both lower limbs are treated from the tips of the toes to the groin folds or at least up to mid-thigh).
- Lumbar and sacral zones.
- Reciprocal extremities (treat the leg and the opposite arm according to the principles "Left-right" and "right-left", "from toes to fingers").

2.2. Additional treatment zones:

- Collar zone.
- Anterior projection of the pancreas (epigastric zone).
- Anterior projection of the liver.
- Projection of the kidneys.
- General zones "3P6P", etc.

2.3. If there are eye complications (diabetic retinopathy):

- Additionally treat orbital (on the projection of the eyes through closed eyelids) and paraorbital (around the eye sockets) by the comfortable sensations with the built-in electrode or external electrodes ("Goggles", "Pawns", etc.)
- "6 points" of the exit of the trigeminal nerve on the face.
- Collar Zone.

!! In one procedure, it is recommended to treat 2-3 zones from the above listed in various combinations and alternations.

!! The optimal time recommended for each procedure is still getting the positive dynamics of the complaint that the patient presented before this procedure.

!! To increase the effectiveness of the procedure, it is recommended when treating the skin in any treatment zone to look for and preferentially treat the signs of Small Asymmetry.

!! The treatment is performed on the basic parameters of the device (D-0, F-60 (90) Hz). With the higher level of training, it is recommended to use the corresponding advanced parameters and D-1 mode.

SCENAR therapy for the diabetic foot syndrome has earned grateful feedback from patients. The treatments are affordable, easy to perform, and effective. SCENAR therapy complements the general treatment and accelerates the process of restoring the blood circulation in the extremities and reducing the symptoms accompanying this syndrome until they disappear completely.

Healthcare practitioners use SCENAR devices in their practice with their patients and to treat their own pain because:

- SCENAR devices provide non-pharmaceutical, non-invasive ongoing pain relief that can last for hours and longer
- These products are **USFDA**-cleared for the symptomatic relief and management of chronic, intractable pain and adjunctive treatment in the management of post-surgical and post-traumatic pain

Since the diabetic foot develops with the diabetes mellitus, first of all, it is necessary to normalize carbohydrate metabolism. The patient should be under the supervision of an endocrinologist, strictly follow his instructions to independently control the blood glucose level. If you notice any changes then contact your Podiatrist/Diabetes Nurse or GP for advice