POSTCHOLECYSTECTOMY SYNDROME
General recommendations for SCENAR procedures in case of complaints

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Cholecystectomy is a surgical removal of the gallbladder.

The reason for the surgery may be:

- acute cholecystitis (inflammation of the gallbladder),
- chronic cholecystitis with recurring exacerbations,
- Blockage (obstruction) of the bile duct with gallstone disease (presence of stones in the gallbladder).

Conditions that can form after cholecystectomy:

1. *Postoperative abdominal pain* - constant or periodic, of varying intensity. It can be localized in the projection of the surgery. This pain appears as a result of the surgery and can hurt up to 4 weeks after it.
2. *Postcholecystectomy syndrome* (PCES or dysfunction of the sphincter of Oddi) is a set of clinical symptoms that appear when the function of the biliary system is dysfunctional. PCES occurs in 40-45% of operated patients as a result of a decrease in the adaptive capacity of the body for various reasons. There is a change in the contractile ability of the sphincter of Oddi, which makes it difficult for bile and pancreatic juice to enter the intestines.

Clinical signs of postcholecystectomy syndrome can be:

- *Pain* - constant or periodic, of varying degrees of intensity, which can occur immediately after the operation, after months, and sometimes even after some years. Usually pains are localized in the epigastric region and (or) in hypochondria, more often in the right.
- *Dyspeptic manifestations* - may manifest as nausea, vomiting, bloating and rumbling in the stomach, belching, dryness and bitterness in the mouth, heartburn, unpleasant, sensations after eating fatty foods, diarrhea, the appearance of fat in the feces.
- *Psycho-emotional disorders* – internal tension, anxiety and fear, irritability, or emotional lability.
- *Possible fever, chills, tachycardia, jaundice and itching*.
- *Possible gradual development of general asthenization and hypovitaminosis of the body*, which manifest themselves as weakness, fatigue, drowsiness, apathy, decrease appetite, stomatitis, cheilitis, significant weight loss, etc.

Your doctor may prescribe certain medications for you to help reduce or manage some of these symptoms. At the same time, rehabilitation in postcholecystectomy syndrome is considered as the most important component of the treatment process.

The main goal of rehabilitation after cholecystectomy is to help the patient's body to cope with postoperative manifestations as quickly and efficiently as possible, to compensate for liver function in the absence of a gallbladder and to make the bile ducts “work” for the removed gallbladder.

One of the most effective non-drug methods of PCES treatment is SCENAR® therapy (Self-Controlled Energy-Neuroadaptive Regulation). SCENAR® procedures significantly improve the overall postoperative picture and contribute to a multiple reduction in the number of possible complications. The course treatment with SCENAR® therapy provides activation of the lymphatic system and blood

vessels, which accelerates epithelialization and reduces postoperative edema. Improvement of microcirculation forms the morphofunctional basis of anti-inflammatory, anti-edematous, resorption and hypotensive effects of SCENAR ® therapy not only in the area of the local SCENAR treatment, but also in internal organs.

Rehabilitation with SCENAR therapy can be started both immediately after the operation and at any stage of PCES formation.

1. The period of postoperative pain.

The goal of SCENAR therapy in this period is to relieve pain syndrome, accelerate postoperative recovery of the body, prevent the formation of adhesions, and prevent the formation of postcholecystectomy syndrome.

If the patient can *clearly define the exact boundaries of his/her pain*, then it is necessary to treat the skin area one more electrode around the perimeter than the patient shows.

If there are *no specific boundaries of the complaint*, it is necessary to determine the most painful area in the abdomen by palpation. Then using SCENAR device in D-0 treat the selected area from top to bottom in order to reveal SCENAR signs on the skin in the treatment zone (signs of Small Asymmetry: difficult electrode sliding/ stickiness, difference in sensation of current, sound difference, hyperemia or pallor). Next, it is necessary to treat the found signs until they change to the opposite state, and then assess the dynamics of the initial pain. If pain moves/ shifts to another zone, move the device there and repeat the same procedure **("Hunt for pain**" technique). In addition, it is recommended to periodically alternate the treatment of a symmetrical zone of the skin, the corresponding zone of the spine on the complaint level, the thoracic spine and paravertebral. The number of repetition of procedures depends on the recurrence of complaints and can vary from 1 to 4-5 per day. The duration of one procedure - until the pain disappears completely or significantly decreases. The duration of the course of therapy is until the complaints disappear.

Device settings: D-0, E (Energy) - sub comfortable,

SCENAR Pro: F> 120Hz, Int - 5-7, Dmpf - Sc2-Sc-4 or corresponding presets.

CHENS: F-340 (90) Hz, FM, AM 3: 1, preset P-2.

2. Postcholecystectomy syndrome.

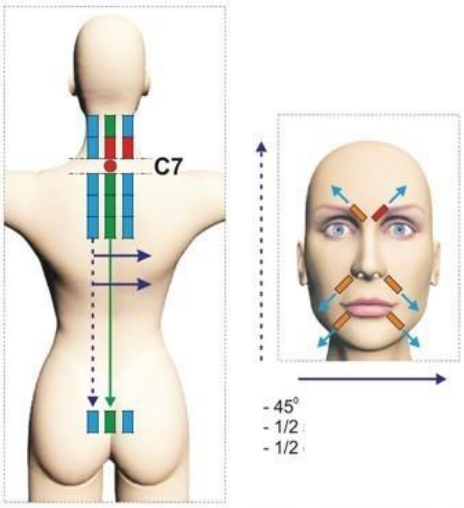
The goal of SCENAR-therapy in this period is the functional recovery of the patient's body in the presence of symptoms of an emerging or already formed PCES.

If there is pain in the abdomen at the time of the procedure, perform the treatment in the same way as described in section # 1.

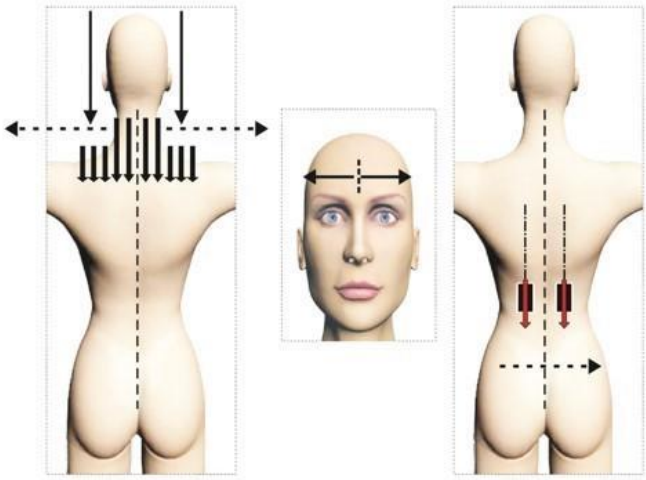
In the absence of pain at the time of the procedure, it is necessary to palpate the entire abdomen and determine whether there is pain in the abdomen, as well as its severity. In the presence of several zones of pain, it is necessary to choose the most painful one, then treat it as described above. After that, repeat palpation of the abdomen and compare the dynamics of pain. In case of insufficient dynamics or identification of another zone of maximum pain, repeat its treatment and re-evaluate the dynamics of pain on palpation. It is recommended to treat 2-3 painful abdominal zones in one procedure.

I*n the presence of symptoms of dyspepsia or symptoms of general discomfort* (general ill-being), it is recommended to use the treatment of General Zones ("3 Pathways 6 Points", "Collar Zone", "Palms", " ABDOMEN zone").

In the presence of local manifestations of hypovitaminosis in the form of stomatitis, cheilitis, etc. treat their localization.



«3P6P» – three pathways (on the back) + six points (on the face)



«CZ» – collar zone + forehead + adrenal gland projection

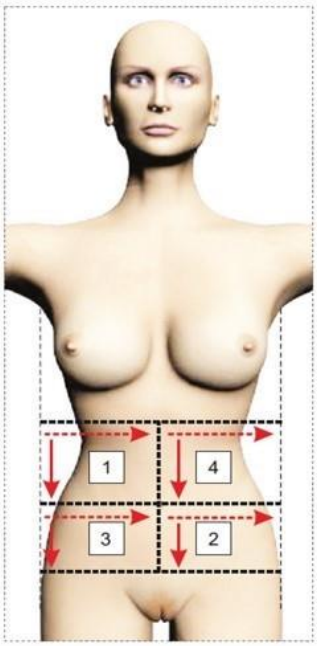
Device settings: D-0, D-1, E (Energy) - from weak to comfortable sensations.

SCENAR Pro: F = 90Hz (60Hz, 15Hz, 120Hz, 150 Hz), Dmpf - Sc-off, Sc-2, Sc-4 or corresponding presets, Presets

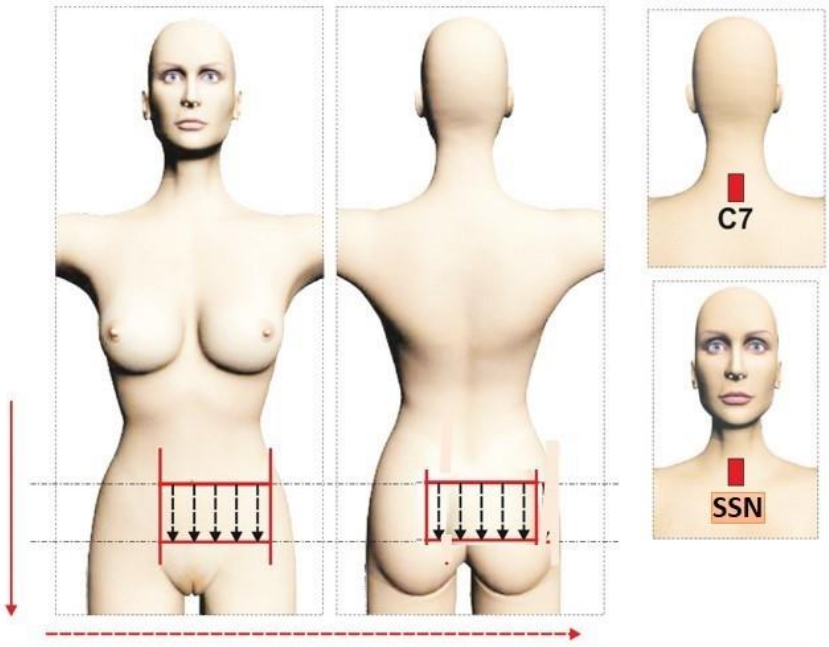
CHANS 01M (Sport D): F-90Hz (60Hz, 14Hz), FM, AM 3: 1, presets P-1, P-2.

The number of repetition of procedures is 1-2 times a day.

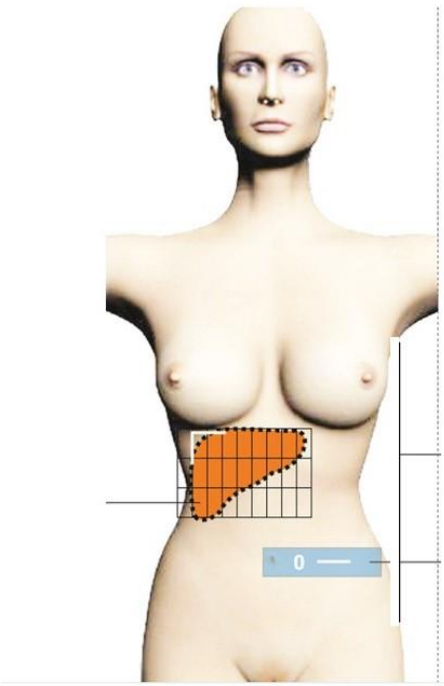
During the procedure and at different procedures, the device settings must be alternated (this will accelerate the positive dynamics). To increase the effectiveness of SCENAR therapy, it is recommended to alternate and combine SCENAR treatment on local and General Zones ("3 Pathways 6 Points", "Collar Zone", "Palm", "Abdomen zone", "Mills**",** "Neck Ring**",** "Craniotherapy" techniques (treatment of scalp and along the border of hair growth)).



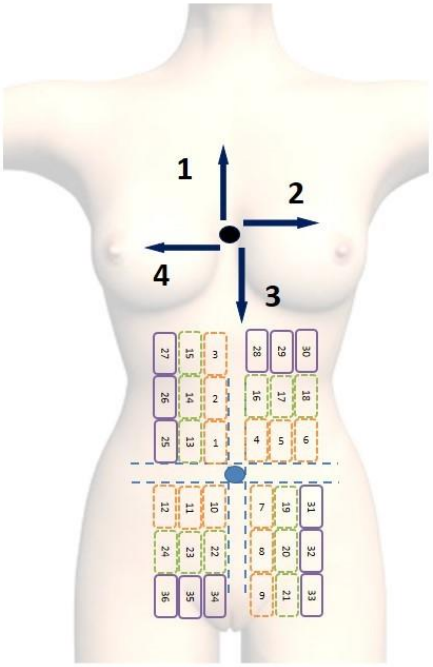
«ABDOMEN zone» (4 abdominal squares) upper and lower



«PALM Zone» – projection of a palm on the abdomen + on the back + C7 + supra sternal notch

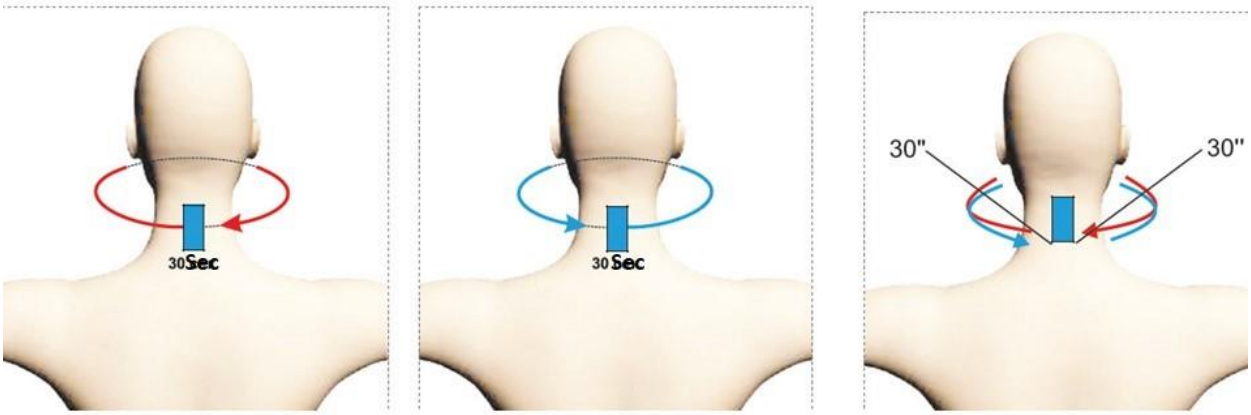


Anterior projection of the pancreas (epigastric zone).
Anterior projection of the liver.



SCENAR Technique "Circle THREES" around the navel (Algorithm)

Treatment with the "Small" electrode or device electrode along the hairline around the head.



SCENAR Technique "Neck Ring"

!! When treating patients with abdominal pain, it is important to exclude causes requiring urgent surgical intervention.

!! Each SCENAR procedure should begin with a survey and examination of the patient, after which an algorithm of treatment on this procedure is designed. Always start any SCENAR procedure by treating the patient's active complaint at the time of the procedure.

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

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

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

!! If there is insufficient effect when using SCENAR Pro or CHANS-SCENAR, it is recommended to take additional training or contact a professional SCENAR specialist.

!! During the rehabilitation and recovery period, the patient needs serious changes and optimization in physical workloads, in nutrition, in health and wellness physical education.

START YOUR HEALING PROCESS!

SCENAR is a new generation of non-invasive technology which activates the self-healing in your body.

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