

Approved:

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« _____ » _____ 2017 г.

**Review of materials (publications)
of clinical use of EHF- and IR-therapy apparatuses
«STELLA-1», «STELLA-2», «CEM-TECH», «SPINOR»
(brief review of 2000-2016)**

№	TITLE	REFERENCE	AUTHORS	MATERIALS AND METHODS	MAIN RESULTS
1.	Balneotherapy of patients with a hypertension combined with a osteoarthritis	Medical procedure (lic. no. FS 2009/172 from 01.07.2009)	Smirnova I. Leviskiy E. Titskaya E. at al.	EHF-therapy with “STELLA-2” apparatus as a part of complex treatment of patients diagnosed with hypertension combined with osteoarthritis.	<ul style="list-style-type: none">- Intracardiac hemodynamic is improved (in 68% of cases)- Physical exercise tolerance is increased (by 18.2%)- Psychological and adaptation status is improved- Development of an antihypertensive effect (in 72% of cases)- Development of a hypocoagulation effect (in 52.1% of cases)
2.	Seasonal optimization of a balneotherapy of patients with a hypertension	“Fisioterapiya. Balneologiya i Reabilitatsiya” journal. 2014, no. 5, p.4-8	Smirnova I. Leviskiy E. Bredihina E. Simagaeva N. Antipova I. at al.	EHF-therapy of BAP with “CEM-TECH” apparatus (57-63 GHz) as a part of complex treatment of 186 patients diagnosed with hypertension.	Effects: <ul style="list-style-type: none">- Antihypertensive effect;- Normalization of BP circadian rhythms;- Reduced values of the index of a cardiac performance;- Improved systolic and diastolic myocardial function;- Decrease of asthenic syndrome (general physical and mental asthenia)- Positive dynamic of the brain electrical activity;- Improved performance lipid profile;- Significantly increased integral index of health.

3.	EHF-therapy as a part of complex balneotherapy of patients with a chronic cholecystitis combined with a opisthorchiasis	Medical procedure (lic. FS no. 2010/187 from 27.05.2010) Tomsk 2010	Leviskiy E. Beloborodova E. Poddubnaya O. Golosova O.	EHF-therapy with “STELLA-1” apparatus as a part of complex treatment of 61 patients diagnosed with chronic cholecystitis combined with chronic opisthorchiasis.	Effects: - Considerably improved overall health of patients (93.4% of patients have no complaints); - Improved indications of functional activity of the biliary system; - Significant improvement of the liver blood flow according to Color Doppler flow imaging; - Effectiveness is 86.4%; - Increased duration of the remission; - Reduced frequency of disease exacerbations.
4.	Opportunities of a group therapy of a gallbladder's dyskinesia	“Byulleten' Sibirskoj mediciny” journal, 2012 no. 1, p.160-166	Poddubnaya O. Ugol'nikova O. Leviskiy E.	EHF-therapy with “STELLA-2” apparatus as a part of complex treatment of 57 patients diagnosed with gallbladder's dysfunctions.	Effects: - Completely eliminated pain syndrome in 81.4% of cases; - Normalized motor function of the gallbladder of patients with hypomotor disorders in 92.6% of cases; - Increased number of patients (up to 88.9%) with high level of reactivity; - Improved indicators of the health index; - Immediate efficiency was 92.6%.
5.	The relation between the effectiveness of the treatment and features of therapeutic procedures for patients with chronic cholecystitis	“Sibirskiy vestnik Hepatologii i Gastroentnrologii”, journal 2012, no. 26, p. 109-114	Poddubnaya O.	EHF-therapy with “STELLA-1” apparatus (background resonance mod) as a part of complex treatment of 121 patients diagnosed with chronic cholecystitis combined with chronic opisthorchiasis.	Effects: - Pain is eliminated in 97% of cases; - Symptom Kera is eliminated in 100% of cases; - Lymphocyte level increase; (increased reactivity of the body) - Biochemical blood parameters' normalization (AST, ALT, bilirubin, thymol); - Normalization of indicators of the motor-evacuation function

					<p>of the biliary system;</p> <ul style="list-style-type: none"> - Significant improvement of the hepatic blood flow; - Improved and normalized colloidal stability of bile; - Overall therapeutic effectiveness was up to 87.5%.
6.	Modern therapy in the early postoperative rehabilitation of patients with cholelithiasis	“Byulleten' Sibirskoj mediciny” journal, 2013 no. 12, p.120-126	Poddubnaya O. Marsheva S.	EHF-therapy with “CEM-TECH” apparatus as a part of complex treatment of 108 patients after laparoscopic cholecystectomy.	<p>Effects:</p> <ul style="list-style-type: none"> - Pain is eliminated in 78.9% of cases; - Other clinical indicators and symptoms elimination in more than 78% of cases; - Normalization of initially increased blood biochemical parameters (AST, ALT, LDH, ALP, GGT, bilirubin, thymol); - Hepatic blood flow indicator increase according to the Color Doppler imaging; - Vegetative status indicators are normalized (Kerdo index, Heldebrand's coefficient); - Significant reduced emotional stress level; - Health status and physical functioning indicators' normalization; - The overall effectiveness was 94.8%
7.	Therapy for the rehabilitation of patients with cholelithiasis in the early postoperative period	“Sibirskiy vestnik Hepatologii i Gastroentnrologii”, journal 2013, no. 27, p. 38-40	Poddubnaya O. Marsheva S.	EHF-therapy with “STELLA-2” apparatus as a part of complex treatment of 108 patients diagnosed with cholelithiasis in early post-surgery period	<p>Effects:</p> <ul style="list-style-type: none"> - Pain elimination in 78.9% of cases; - Normalized indicators of the hepatic blood flow according to Color Doppler flow imaging; - Positive influence on sympathetic and parasympathetic effects ratio of the vegetative nervous system; - Decrease of psihoemotsional and overall stress level; - Increased number of patients with a calm and increased

					reaction of activation up to 86.8%; Effectiveness is 94.8%.
8.	Features of early rehabilitation of patients with cholelithiasis after the endoscopic cholecystectomy	“Byulleten' Sibirskoj mediciny” journal, 2013 no. 1, p. 109-113	Poddubnaya O. Marsheva S.	EHF-therapy with “CEM-TECH” apparatus as a part of complex treatment of 73 patients diagnosed with cholelithiasis in early post-surgery period (7-10 days after cholecystectomy)	Effects: - Pain elimination in 83.4% of cases, the remaining part has significant decrease of pain intensity; - Normalized levels of AST and ALT; - Increased indicators of adaptive abilities by 23.7%; - Significant decrease of psycho-emotional stress. The overall efficiency was 90.5%.
9.	The relation between comprehensive therapy and its efficacy in patients with chronic cholecystitis	“Physioterapiya, Balneologiya i Rabilitatsiya”, journal, 2014, no. 6, p. 19-24	Poddubnaya O.	EHF-therapy with “STELLA-2” apparatus (52-78 GHz, background mode) as a part of complex treatment of 301 patients diagnosed with chronic cholecystitis combined with chronic opisthorchiasis.	The therapeutic effect in the form of a "significant improvement" and "improvement" was up to 87.9% and has remained up to 6 months in 72.0% of cases.
10.	Therapy of patients with dysfunction of the gallbladder and diseases of the biliary tract affected of psycho-vegetative imbalance	“Physioterapiya, Balneologiya i Rabilitatsiya”, journal, 2014, no. 3, p. 12-18	Poddubnaya O. Ugolnikova O. Levitskaya T.	EHF-therapy with “STELLA-2” apparatus as a part of complex treatment of 57 patients diagnosed with dysfunctions of gallbladder and symptoms of psycho-vegetative imbalance.	Effects: - The clinical symptoms of the disease were eliminated in 92.5% of cases; - Normalized motor function of the gallbladder; - Increased level of the body reactivity; - Health index was increasing; - Significantly improved indicators of the colloidal stability of the bile;

					<ul style="list-style-type: none"> - Normalized balance of the various parts of the vegetative nervous system that provides normalization of the functional state of the biliary system; - Significantly improved performance of psychoemotional status (reduction of situational anxiety, emotional stress levels). <p>Immediate efficiency was more than 90%.</p>
11.	Complex balneotherapy of patients with dyskinesia of the gallbladder affected by the emotional stress	Medical procedure (lic. no. FS 2011/278 from 12.09.2011) Tomsk 2011	Levitskiy E. Poddubnaya O. Smirnova I. Ugolnikova O. Levitskaya T. Barabash L. Golosoova O. Alaitceva S. Dostovalova O. Skurlatova O. Lyapunova I.	EHF-therapy with "CEM-TECH" apparatus as a part of complex treatment of 99 patients of working age with dysfunctions of the gallbladder affected by psychoemotional stress	<p>Effects:</p> <ul style="list-style-type: none"> - Considerably improved the overall health of patients (67.3% of them had fully stopped complaining on health, the rest had started complaining significantly less); - Improved indicators of the functional status of the liver and biliary system; - Improved indicators of the hepatic blood flow; - Improved indicators of adaptive abilities of the body; - Balanced status of the sympathetic and parasympathetic influences; - Decreased level of situational anxiety and emotional stress. <p>The efficiency of the therapy was 96.2%.</p>
12.	Complex balneotherapy of patients with dysfunctions of the gallbladder and diseases of the biliary tract affected by psychoemotional stress	Guidelines, registration number 80-13, approved by FMBA of Russian Federation, Tomsk 2013	Poddubnaya O. Levitskiy E. Ugolnikova O. at al.	EHF-therapy with "CEM-TECH BF" apparatus as a part of complex treatment of 57 patients diagnosed with dysfunctions of the gallbladder and diseases of the biliary tract as a result of psychoemotional stress.	<p>Effects:</p> <ul style="list-style-type: none"> - Clinical symptoms completely eliminated in 92.5% of cases; - Normalization of motor function of the gall bladder in 83.6% of cases; - Improving echographic structure of bile in 70.0% of cases; - Improved biochemical indicators of gallbladder's bile stability in 81.4% of cases; - Improved indicators of adaptive abilities of the body;

					<ul style="list-style-type: none"> - Balanced status of the sympathetic and parasympathetic influences of the vegetative nervous system in 96.4% of cases; - Improved psycho-emotional status in the form of decreased situational anxiety and emotional stress level in 85.2% of cases. <p>The efficiency was 92.6%.</p>
13.	Early postoperative rehabilitation of patients with gallstone disease affected by the psycho-vegetative imbalance	Guidelines, registration number 81-13, approved by FMBA of Russian Federation, Tomsk 2013	Poddubnaya O. Levitskaya T. Marsheva S.	EHF-therapy with "CEM-TECH BF" apparatus as a part of complex treatment of 108 patients after laparoscopic cholecystectomy (5-10 days after surgery)	<p>Effects:</p> <ul style="list-style-type: none"> - Pain was completely eliminated in 78.9% of cases, and a significant reduction of pain for the rest of the patients; - Positive impact on general and biochemical blood test indicators; - Reduced sympathetic influence of the vegetative nervous system of patients with a prevalence of sympathicotonia (reduced impact of hypokinesia in the biliary tract and reduced stagnation effect); - Reduced parasympathetic impact of the vegetative nervous system of patients with a prevalence of parasympathicotonia (decreased spastic effects in the bile tract); - Significantly decreased level of psychoemotional stress; - Significant increase in the rate of non-specific resistance of the body; <p>The efficiency of the therapy was 94.8%.</p>
14.	Early postoperative rehabilitation of patients with gallstone disease affected by the psychoemotional stress	"Voprosy balneologii, physioterapii i lechebnoi fizkultury", journal, 2013, no. 6, p. 36-41	Poddubnaya O. Marsheva S.	EHF-therapy with "CEM-TECH" apparatus as a part of complex treatment of 108 patients diagnosed with cholelithiasis (planned cholecystectomy) as a result of psychoemotional	<p>Effects:</p> <ul style="list-style-type: none"> - Pain was completely eliminated in 78.9% and a significantly reduced for the rest of patients; - Positive impact on general and biochemical blood test indicators; - The patients with prevalence of sympathicotonia had reduced

				stress.	<p>sympathetic ANS influence (reduced effect of hypokinesia on the biliary tract and reduced stagnation phenomena);</p> <ul style="list-style-type: none"> - The patients with a prevalence of parasympathicotonia had decreased parasympathetic ANS influence (reduced spastic effect on the bile ducts); - Significantly decreased emotional stress level; - Significant increased rate of non-specific resistance of the body; <p>The efficiency was 94.8%</p>
15.	EHF-therapy of patients with vertebrogenic neurodystrophic pseudo-cardialgia (syndrome of middle scalene muscle)	Guidelines no. 2002 / 74 approved by the Russian Ministry of Health, 2002.	Levitskiy E. Strelis L. Golosova O. Markov O.	EHF-therapy with “Stella-2” apparatus (59-63 GHz) of 108 patients diagnosed with syndrome of middle scalene muscle.	<p>Effects:</p> <ul style="list-style-type: none"> - Positive trend of complex clinical symptoms (58% reduced pain in the shoulder blade, 71-74% reduced pain in neuroosteofibrosis zones (middle scalene muscles, anterior-upper scapular pain point, the middle and lower portions of the front spongy muscle); 31% reduced neuro-vascular disorders; progress of the tilt and rotation of the head in a healthy way by 17% and 12% respectively; - Growth of sedative effect on the 4th day of treatment; - Positive trend of paraclinical parameters (normalization rheographic index of the area of the shoulder girdle, 2.4 times increase in the amplitude of the M-response of the front spongy muscle, the positive trend of conductivity indicators of biologically active points of the affected side (Nv2, Nv1b, Ag1c, Pr1 , Pr2). <p>The efficiency was 96%.</p>
16.	Complex treatment balneotherapy of patients with gallbladder dyskinesia in the	“Meditsina ekstremalnykh situatsiy”, journal, 2012, no. 1, p. 118-	Poddubnaya O. Smirnova I. Ugolnikova O. Levitskaya T. at al.	EHF-therapy with “Stella-2” apparatus (40-63 GHz) as a part of complex treatment of 59 patients diagnosed with a	<p>Effects:</p> <ul style="list-style-type: none"> - Normalized indicators of the motor-evacuation function of the gallbladder (volumetric characteristics, motor function, index of contractile function) in 74.1% of cases;

	period of the psychoemotional stress	123		dyskinesia of a gallbladder in combined with chronic calculous cholecystitis in a stage of remission.	<ul style="list-style-type: none"> - High level of reactivity was detected in 94.73% of cases; - Reduction of the initially high level of cortisol in the blood, indicating an anti-stress effect of therapy; - Significantly reduced phsyco-emotional stress, situational anxiety, and emotional stress; - Increase of overall health index; - General efficiency was 90.87%
17.	Millimeter waves for the treatment of patients with neurological aspects of osteochondrosis	Guidelines no. 2000/199, 2000, MoH of Russian Federation	Miryutova N. Mavlyautdinova I. Kozhemyakin A. edited by professor Levitskiy E. MD.	EHF-therapy with “Stella-1” apparatus (52-78 GHz, power flow density 0.75 mW/cm ² , pulse mode 42.19 GHz, $\lambda=7.1$ mm, average power is 1 mW/cm ²) as a part of complex treatment of 156 patients diagnosed with neurological manifestations of osteochondrosis, including post-surgery discectomy. (54 patients)	<p>Effects:</p> <ul style="list-style-type: none"> - Decrease of all major symptoms (pain significantly decreased in 98% of cases, including 56% of patients with fully eliminated pain); - Changed quality characteristics of pain - less burning, sharp, shooting feelings, pain became bearable with aching, dull feelings; - Regress of muscular-tonic, vegetative-vascular disorders, tension symptoms, sensory and motor disorders; - Reduced thermal asymmetry; - Positive trend of the amplitude (from $0,9 \pm 0,75$ to $2,38 \pm 1,07$ mV) and speed (from $42,5 \pm 5,66$ to $53,5 \pm 5,06$ m/s) indicators of the functional state of neuromuscular apparatus (electro-neuromyographic examination).
18.	Anti-stress therapy with application of the background resonance radiation	Manual for physicians, approved by the Tsentr adaptatsionnoi mediciny of MoH of Russian Federation,	Sinitskiy A. Tverdohlib D. Azarova N.	EHF-therapy of BAP with “Stella-1” apparatus in background mode of 74 patients who had undergone a traffic accident and undergoing a course of adaptive therapy and apparently healthy athletes who had a stress.	<p>Effects:</p> <ul style="list-style-type: none"> - Rapid regression of the disease; - Significantly improved spirogram indicators; - Stabilization of the sympathetic and parasympathetic ratio of the autonomic nervous system at the normal level, according to data obtained from cardiointervalometry examination;

		2002			- Normalized conductivity indicators of BAT (R. Voll).
19.	EHF-therapy in the complex rehabilitation of patients with exogenous-organic brain damage	Guidelines, approved by TNIIPZ (Tomsk Mental Health Research Institute), 2003.	Semke V. Bohan N. Golosova O. at al.	EHF-therapy of BAP with “Stella-2” apparatus in addition to basis therapy of 133 patients diagnosed with exogenous-organic brain damage (traumatic, vascular, infectious toxic and complex genesis).	Effects: <ul style="list-style-type: none"> - Positive trend on the MADRS scale; - Self-depressive feelings became labile; - Improved mood after improvement of the overall health conditions; - Eliminated headaches; - Patients started believing in the treatment (hypochondriac mood was corrected); -Dose of antidepressants and tranquilizers had been reduced without further deterioration; - Decreased total anxiety score on the Hamilton scale; - Reduced anxiety, phobic disorders - fear of heart attack, the fear of death; - Reduced frequency of adverse reactions from taking medicines in the form of apathy, drowsiness, impaired concentration, slackness; - Reduction of the severity and the regression of cerebro and cephalgic disorders; - Reduction of anxiety, anxiety of patients and tightening phobic anxieties; - Significant clinical improvement.
20.	EHF-therapy in the treatment of chronic chlamydial Infection during a	Materialy pervogo regionalnogo nauchnogo	Arsenyeva A. Agarkova L. Dikke G. Vorobyov. Y.	EHF-therapy with “Stella-2” apparatus (57GHz) as a part of complex treatment of 40 pregnant women in	Effects: <ul style="list-style-type: none"> - Reduce risk of abortion; - Reduced coleitis and chronic intrauterine fetal hypoxia

	pregnancy period	foruma "Mat' i Ditya", KAZAN, 20-22 March 2007		the age from 17 to 35.	frequency; - Reduced number of the utero-placental blood flow disorders; - Normalized immunity key indicators; The efficiency was 92.8%.
21.	EHF-therapy in the treatment of uterine myoma with diffuse forms of mastitis	Guidelines, approved by TNIKiF, 2001.	Dikke G. Gridneva T. Velichko S.	EHF-therapy with "Stella-1" apparatus as a part of complex treatment of 30 women diagnosed with uterine myoma and mastopathy and aged 28-53 years.	Methods: anamnesis, pelvic examination, ultrasound examination of the pelvic organs, bacterioscopy of vaginal secretions smears, immunological parameters blood test (T- and B-cells, immunoglobulin A-, G-, M-classes, NBT test and circulating immune complexes), histological examination of aspirates and scrapings; mammography (women older than 40 years) or ultrasound breast examination (women under 40 years), mamologist consultation, the method of electrodiagnostics by R. Voll. Effect: - Reduced or eliminated pain, engorgement and breast tissue changes; - Reduction of the severity of the manifestations of mastitis from medium-heavy to low; - Increased number of lymphocytes; - Decreased level of T-suppressors; - Decreased circulating immune complexes. The effectiveness of the treatment, estimated by direct results in the form of: significant improvement was 23%, improvement was 70%, unchanged was 7%.
22.	The method of complex treatment of gestosis during pregnancy	Russian Federation patent number 2240101 2003.	Filippov O. Bortnikova M.	EHF-therapy of BAP with "Stella-1" apparatus in background mode as a part of complex treatment of 50 women with pregnancy of	Effects: - Positive impact on hemostasis of women; - Reduced concentration of main clotting substrate - fibrinogen, which led to a decrease in hypercoagulation which

				24 to 36 weeks, complicated by preeclampsia mild to moderate severity.	was a characteristic of chronic disseminated intravascular coagulation accompanying gestosis and manifested by the microcirculation system poly-thrombosis; - 5.3 times less number of fetal hypoxia cases; - 5.0 times less cases of observed intrauterine growth retardation; - 1.25 times less frequency of cesarean section procedures; - Positive impact of electromagnetic radiation of millimeter range on the hemostatic system, hormonal, metabolic processes and adaptation indicators of pregnant women contributed to the optimization of the gestational process and the favorable outcome of pregnancy.
23.	EHF-therapy in the treatment of urogenital chlamydia during a pregnancy	Guidelines by Tomsk Research Institute of Obstetrics, Gynecology and Perinatology, Tomsk, 2005	Dikke G. Arsenyeva A.	EHF-therapy with "Stella-1" apparatus in addition to standard drug therapy in complex treatment of 82 pregnant women diagnosed with chronic urogenital chlamydia.	Effects: - Reduced frequency of the threat of termination of pregnancy by 36%, colicis by 18%, chronic intrauterine fetal hypoxia by 22%; - Utero-placental blood flow disorders were observed less by 20%; - Normalized key immunity indicators; Therapy efficiency was 92.8%.
24.	The use of electromagnetic radiation of extremely high frequency in the complex prevention of gestosis	"Mat' i Ditya", journal, 2005, no. 4 (23), p. 32-34	Shatalova E. Miheenko G.	EHF-therapy of BAP with "Stella-1" apparatus in addition to traditional drug therapy of 100 women with predicted high risk of gestosis in a first trimester of pregnancy.	Effects: - Significantly decreased severity and slowed the appearance of the symptoms of the complication, which was manifested by reduction of the incidence of preeclampsia and 3 weeks delay of its appearance in average; - Improved compensatory and adaptive reserves of the body, which determined more favorable course of pregnancy and

					<p>childbirth;</p> <ul style="list-style-type: none"> - 88% of women had vaginal delivery on time, 12% - abdominal delivery caused by abnormalities of labor; - Need of the Caesarean section was not observed. <p>An average estimate of newborns according to Apgar scale was $7,78 \pm 0,065$.</p>
25.	Complex therapy of patients with chronic prostatitis with erectile dysfunction	“Byulleten' Sibirskoj mediciny” journal, 2012 no. 2, p.19-25	Kolmatsuy I. Barabash L. Alaytseva S. Dostovalova O. Golosoova O.	EHF-puncture with “Stella-2” apparatus as a part of complex treatment of 94 patients diagnosed with a chronic abacterial prostatitis (3A, 3B; NIH, 1999) in the stage of incomplete remission or latent inflammation complicated by erectile dysfunction.	<p>Effects:</p> <ul style="list-style-type: none"> - Eliminated inflammation syndrome of the pelvic organs (in 89.0% of cases); - Pain elimination (in 90.6% of cases); - Eliminated dysuric disorders (in 81.2% of cases); - Improved microcirculation (in 84.4% of cases); - Improved endothelial function of the penis vessels (in 82.8% of cases); - Normalized autonomic tone,; - Normalized lipid peroxidation and antioxidant protection, the level of testosterone, which helped to recover erectile functions (in 84.4% of cases) and improvement of the life quality (1.9 times), while the effect of treatment was remaining for 6 months in 86% of cases.
26.	Complex balneotherapy of patients with climacteric disorders in men	Manual for physicians, approved by MoH of Russian Federation, 2000.	Neplohov E. Kolomatsuy I.	EHF-therapy with “Stella-2” apparatus as a part of complex treatment of 92 patients in the age from 48 to 68 diagnosed with clinical symptoms of andropausal disorders.	<p>Effects:</p> <ul style="list-style-type: none"> - Eliminated pain and dysuric syndrome; - Improved sexual function; - Increased libido; - Increased adequate erections with the normalization of the time of coitus; <p>According to manual prostate study, reduction of pain and</p>

					swelling, the normalization of its tone were observed. According to the analysis of prostatic secretions, the normalization of white blood cells number and an increased concentration of lecithin granules were observed. Therapy efficiency was 76%.
27.	A method of treating patients with osteoarthritis in combination with flat feet	Russian Federation patent number 2271194 from 07.02.2004	Titskaya E. Reshetova G. Mihaylova E. at al.	EHF-therapy of BAP with "Stella-2" apparatus (40-43 GHz) as a part of complex treatment of patients diagnosed with osteoarthritis combined with flat feet.	Effects: - Significant improvement of the main disease symptoms; - Less pain in joints while moving and rest; - Reduced effect of reactive synovitis; - Less pain while palpation of joints; - Reduced limitation of movements in joints caused by pain; - Less muscle pain; - Reduction asthenovegetative manifestations; - Positive change appeared after 4-5 procedure (increased initially low tone of the lower limb muscles), which was an important factor of axis settings correction for the joint health, and as a result, the protection of abnormal limb joints from progressive destruction was observed; - 4 times increased amplitude of modal oscillations of patients with low-amplitude electromyogram foot muscles and 2.5 times increase of values of shank muscles amplitudes ($p < 0.05$). Therapy efficiency was 96.4%.

28.	Chronobiological method of the rehabilitation of patients with osteoarthritis in the conditions of Siberian region using physical factors	“Sibirskiy meditsinskiy zhurnal”, journal, 2012 vol. 27, no. 1	Titskaya E. Levitskiy E.	EHF-therapy of BAP with “CEM TECH” apparatus as a part of complex treatment of 116 patients with osteoarthritis in adulthood.	<p>Effects:</p> <ul style="list-style-type: none"> - 1.5 times less pain manifestations in the joints while moving and 1.6 times less starting pain manifestations; - Significantly reduced tenderness while palpation of periarticular tissues; - Reduced number of patients with symptoms of reactive synovitis by 3 times; - The number of patients with limitation of joint movement and violation of the supporting lower limb function was reduced by 46.52%; - All patients stop taking NSAIDs; - Decreased values of the stress index of patients with initially increased autonomic tone; - Decreased excessive sympathetic influences and activation of humoral regulation; - Increased number of patients with a high level of reactivity; - Normalization of ESR and ceruloplasmin indicators; - Decreased values of initially high levels of sialic acid, catalase and malondialdehyde; - Increased percentage of T-helper and T-suppressor subpopulation of lymphocytes, which was accompanied by an increase in convincing suppression index values; - Increased values of both the average and the maximum amplitude of the interference curve voluntary contraction <i>m.m.rectus femoris</i>, indicating the increase of the functional activity of neuro-motor apparatus of the lower limbs; <p>Therapy efficiency was 81.50%. Therapeutic effect had been remaining for 10 months in average.</p>
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29.	Optimization of rehabilitation of patients with osteoarthritis in a mid-latitude area	“Sibirskiy meditsinskiy zhurnal”, journal, 2011, no. 8, p. 92-95	Titskaya E. Levitskiy E.	EHF-therapy of BAP with “CEM TECH” apparatus (40-43 GHz) as a part of complex treatment of 124 patients diagnosed with osteoarthritis.	<p>Effects:</p> <ul style="list-style-type: none"> - Significantly reduced or eliminated joints pain while moving; - Reduced starting pain; - Reduced movement limitation of joints - Eliminated symptoms reactive synovitis; - 2.4 times decreased number of patients with reactivation reactions; - Observed reduction of stress index of the autonomic nervous system; - Increased number of T-lymphocytes, T-helpers and T-suppressors in the blood; - Reduced IgA level; - Improved local blood flow according to Laser Doppler flowmetry; - Increased value of the maximum amplitude <i>mm.rectus femoris</i>; <p>Overall therapy efficiency was 82,6%.</p>
30.	Effect of intensive non-pharmacological therapy with low-frequency magnetic field on the status of the microvasculature of patients with osteoarthritis	“Academicheskiy zhurnal Zapadnoy Sibiri”, journal, 2012, no. 1, p. 16-17	Titskaya E.	EHF-therapy of BAP with “CEM TECH” apparatus (40-43 GHz) as a part of complex treatment of 124 patients diagnosed with osteoarthritis.	<p>Effects according Laser Doppler flowmetry:</p> <ul style="list-style-type: none"> - Normalized average level of perfusion; - Intensified modulation processes of the microcirculation; - Reduced average values of shunting indicator by 41.7%; - Intensified nutritional local blood flow by improving the functional ability of the endothelium and reduction of the spasm of arterioles;

					<ul style="list-style-type: none"> - Increased average values of the amplitudes of the respiratory and cardiac ranges; - Reduced initially high arteriovenous pressure.
31.	Low-frequency alternating magnetic field application as a way to improve the functioning of the microvasculature of patients with osteoarthritis during intensive complex courses of therapeutic physical factors	“Academicheskiy zhurnal Zapadnoy Sibiri”, journal, 2013, no. 3, p. 28-29	Titskaya E. Levitskiy E.	EHF-therapy of BAP with “CEM TECH” apparatus as a part of complex treatment of 75 patients diagnosed with osteoarthritis.	<p>Effects according Laser Doppler flowmetry:</p> <ul style="list-style-type: none"> - Normalized average level of the basal perfusion; - Intensified nutritional local blood flow by improving the functional ability of the endothelium and reduction of the spasm of arterioles; - Normalized average values of the amplitudes of the respiratory and cardiac ranges; - Reduced initially high arteriovenous pressure; - Compensating impact on the activation of venular microvessels wall oscillation; - Regress of the stagnation in venular link of the microvasculature.
32.	EHF-therapy in complex treatment of atopic dermatitis of children	Manual for physicians, approved by the Russian Ministry of Health, 2001.	Gridneva T. Pesterov P. Golosova O. Perminova E. edited by professor Levitskiy E. MD.	EHF-therapy with “Stella-1” apparatus as a part of complex treatment of 64 patients diagnosed with atopic dermatitis of local and spread eritemato squamous form of mild and medium severity.	<p>Methods: general blood and urine analysis, blood chemistry and a total blood protein test, transaminases (AST, ALT), bilirubin, glucose, thymol, immune status (Tx, Tc, T, V., CEC, JgA, M, G, E, FA), liver and kidneys ultrasound study, the SCORAD index, which includes an assessment of objective skin changes - excoriation, erythema, peeling, dryness of skin, infiltration, edema.</p> <p>Effects:</p> <ul style="list-style-type: none"> - Positive trend of the dermal manifestations; - Normalization of the Tx/Tc ratio, the number of the circulating immune complexes and the level of T-suppressor

					Therapy effectiveness was 90.5%.
33.	The use of preformed physical factors in the treatment of psoriatic disease	Manual for physicians, approved by the Russian Ministry of Health, 2001.	Golosova O Zuev A. Dmitruk V. Mihaylova E. Kiselev. S. Letvitskaya N. Salikhova A. edited by professor Levitskiy E. MD.	EHF-therapy with “Stella-2” (4.7-7.1 mm) apparatus as a part of complex treatment of 94 patients diagnosed with psoriasis vulgaris and 48 patients with psoriatic arthropathy.	Effects: - Early disappearance of clinical symptoms (anti-inflammatory, analgesic, regenerative effect, resorption of available infiltrates); - Positive cell immunity changes (increase of the percentage of the total number of T-mature lymphocytes (CD3), quantitative increase in the ratio of T-helper lymphocytes (CD4) to T-suppressor (CD8)); - Reduced concentration of circulating immune complexes in the peripheral blood; - Decreased concentration of anti-inflammatory enzymes in the cytoplasm of neutrophil granulocytes; - Reduced PASI index by 50% and more; Therapy efficiency was 85%.
34.	Correction somatoneurological disorders of alcoholics with the use of non-ionizing electromagnetic radiation of millimeter-wave non-thermal intensity	Medical procedure, 28 pages, Tomsk, 2014	Bohan N. Abolonin A. Mandel A. Kozhemyakin A.	EHF-therapy of an auricular BAP with “Stella-2” (59-61 GHz) apparatus as a part of complex treatment of 132 patients diagnosed with second stage of alcoholism, comorbid traumatic, hypertonic and cervicogenic brain damage.	Effects: - Eliminated: - vegetative disorders in 100% of cases; - affective disorders in 95% of cases; - dissomnia disorders in 81.1% of cases; - cerebral disorders in 97.7% of cases; - cardiovascular disorders in 84.1% of cases; - gastro disorders in 95,5% of cases;

					<p>- myofascial disorders in 90.9% of cases.</p> <p>Therapy efficiency was 92.2%</p>
35.	Correction somatoneurological disorders of alcoholics with the use of non-ionizing electromagnetic radiation of millimeter-wave non-thermal intensity	Medical prodedure, 28 pages, Tomsk, 2014	Bohan N. Abolonin A. Mandel A. Kozhemyakin A.	EHF-therapy of BAP with "Stella-2" (59-61 GHz) apparatus as a part of complex treatment of 90 patients diagnosed with somatoneurological complications of alcohol intoxication.	<p>Effects:</p> <p>- Eliminated:</p> <ul style="list-style-type: none"> - encephalasthenia symptoms in 81.1% of cases; - cephalalgia 100% of cases; - dizziness in 86.6% of cases; - diencephalic vegetative paroxysms in 83.3% of cases; - dysphorias in 75.5% of cases; - depression in 96.6% of cases; - dyssomnia disorders in 97.7% of cases.
36.	Correction somatoneurological disorders of alcoholics with the use of non-ionizing electromagnetic radiation of millimeter range non-thermal intensity	Medical prodedure, 28 pages, Tomsk, 2014	Bohan N. Abolonin A. Mandel A. Kozhemyakin A.	EHF-therapy of BAP with "Stella-2" (59-61 GHz) apparatus as a part of complex treatment of 90 patients diagnosed with pseudo withdrawal syndrome.	<p>Effects:</p> <p>- Eliminated:</p> <ul style="list-style-type: none"> - tahikardiya in 100% of cases; - tremor 100% of cases; - hypertension in 95.5% of cases; - hyperhidrosis in 100% of cases; - dysphoric disorders in 67.8% of caess; - anxiety and depressive symptoms in 91.6% of cases - sub-depressive disorders in 76.7% of cases; - sleep disorders in 93.3% of cases;

					-physical discomfort in 70% of cases; Early Bird awakening in 88% of cases.
37.	Physical rehabilitation of patients with tick-borne encephalitis and Ixodes tick borreliosis	Manual for physicians, approved by the Siberian State Medical University (Tomsk) 2003.	Levitskiy E. Lepekhin A. Pashkov V. Kozhemyakin A. Lukashova L. Buzhak N. Frolov A. Tsesarskaya A.	EHF-therapy of BAP with "Stella-1" (background mode) apparatus as a part of complex treatment (homeopathic medicines) of 30 patients (age 12-61) diagnosed with tick-borne encephalitis (TBE) and Ixodes tick borreliosis (CBI).	Methods: - Blood tests: PCR of RNA of TBE virus, ELISA of blood NRIF for antibodies to the antigen of TBE virus and Borrelia - The study of electrical conductivity of BAT (R. Voll) Effects: - Increased motor activity; - Reduced intensity of headaches and arthralgia; - Normalization of sleep; - Increased number of specific antibodies in the ELISA and NRIF reactions in response to the increase in the TBE virus antigen; - Reduced need for high doses of medicines; - Reduced time of hospitalization; - Reduced costs of the patient's care by 60% in average; - Decreased number of the progress of chronic forms of tick-borne virus infection and neuroinfections TBE.
38.	Clinical and functional assessment of the effectiveness of the EHF-puncture in the rehabilitation of adolescents with vegetative dystonia	ABSTRACT of Phd thesis, Irkutsk, 2007	Mashanskaya A.	EHF-therapy of BAP with "Stella-2" (59-63 GHz) apparatus as a part of complex treatment of 93 female patients (age 15-18) diagnosed with a vegetative dystonia syndrome which was a	Effects: - Improved base efficiency; - Reduction of the manifestations of fatigue and pain syndroms; - Normalization of bioelectric activity in the form of reduced the symptoms of dysfunction at diencephalic level (observed

	syndrome			result of endocrine reconstruction of the body.	regression of slow paroxysmal activity, eliminated symptoms of hemispheric asymmetry, appeared regular alpha rhythm); - Decreased number of hypersympathicotonic patterns (during the transition to orthostasis) and an increased number of normal parameters of autonomic reactivity.
39.	The pulse EHF-therapy in the treatment of children and adolescents with scoliosis	“Vestnik novykh meditsinskikh technologi”, journal, 2006, vol. 8, no. 1, p. 91-92	Abdulkina N. Lipina E. Miryutova N.	EHF-therapy with “Stella-1” (52-78 GHz, impulse mode – 10 GHz) apparatus as a part of complex treatment of 78 children (age 8-15) diagnosed with scoliosis of spine of first, second and third stages.	Effect: - According to global electromyography, indicators were varying: EMG amplitude <i>m.trapezius</i> under the influence of EHF-waves increased by 55%; - the angle of curvature decreased from 2° to 15°; - complete disappearance of scoliosis was observed in 30% of children with I-II stage scoliosis located in the thoracic spine and 1-2 years duration of the disease; - Stage of scoliosis changed from 3 to 2 in 7.8% of cases and from 2 to 1 in 15.2% of cases; - Positive therapeutic effect was observed for children with scoliosis, a positive impact on the neuro-muscular system, improvement of functional capabilities of muscles, decreased deformity degree of spinal.
40.	Reducing the toxic effect of anticancer drugs by the influence of EHF-therapy for patients with lymphoma	“Meditsina i obrazovanie v Sibiri”, journal, 2009, no. 5	Kareva N. Pospelova T. Shamaeva G. Maslova L.	EHF-therapy with "Stella-1" apparatus (42.19 GHz) as an adjuvant procedure to the complex treatment of 130 patients with newly diagnosed lymphomas (80 people with non-Hodgkin's lymphomas (NHL) and 50 with Hodgkin's lymphomas (HL)) - the first and second course of	Effects: - Reduced number of chemotherapy complications of lymphoma and 22.9% increased number of patients that had not experienced adverse effects of cytotoxic medicines for the whole period of the induction of the remission; - Number of patients that experienced certain complications of palliative chemotherapy decreased from 93,3 to 77,1% (p<0, 05); - essentially decreased DRC frequency: leukopenia and

				induction-consolidation's remission.	<p>thrombocytopenia was not observed during the induction period;</p> <ul style="list-style-type: none"> - hemoglobin level increased till the middle of the period of induction of remission at 10 g/l, as well as the number of red blood cells; - reduced frequency of cytostatic depression of hematopoiesis and optimization of peripheral blood in the main group of patients showed a decrease of hematological toxicity of anticancer medicines under the influence of EHF electromagnetic radiation.
41.	Influence of millimeter waves to regress chemotherapy complications and disorders of antioxidant status for patients with lymphoma	“Meditsina i obrazovanie v Sibiri”, journal, 2012, no. 1	Kareva N. Pospelova T. Tsyrendorzhiev D.	EHF-therapy with “Stella-1” apparatus was prescribed in addition to chemotherapy after the first or second course of induction-consolidation's remission as a part of complex treatment of 183 patients with HL and NHL (age 18 to 65)	<p>Effects:</p> <ul style="list-style-type: none"> - No decrease of leukocytes (less than $3.0 \cdot 10^9$ per liter) was registered during the whole period of chemotherapy in 42.2% of cases. No decrease of thrombocytes (less than $150.0 \cdot 10^9$ per liter) was registered during the whole period of chemotherapy in 60.0% of cases; - Reduced hematological toxicity of anticancer medicines as a result of activation of antioxidant processes; - 1.8 times increased antioxidant activity of blood serum; - content of reconstructed thiol groups increased by 22% and reached the control values; - GR activity increased by 1.3 times; - Improved ratio of prooxidant and antioxidant processes in the body that helped to reduce the severity of endogenous intoxication syndrome and the frequency and severity of local and systemic toxic reactions.

42.	EHF-therapy in the prevention of specific antineoplastic therapy complications for patients with lung cancer stage III-IV	“Voprosy balneologii, fizioterapii i lechebnoi fizkultury”, journal, 2013, no. 2, p. 4-7	Kolmatsuy N. Levitsky E. Golosova O. Pyzhova I.	EHF-therapy of a BAP of peripheral blood with “Stella-2” apparatus (individual selection of frequency, 59-63 GHz) as a part of complex treatment of 75 patients with lung cancer stage II-IV.	<p>Effects:</p> <ul style="list-style-type: none"> - Increased number of C3b- and Fcγ-receptor's neutrophils up to 23.53; - Increased number of active granulocytes up to 49.0; - Reduced absorptive ability of neutrophils; - Normalized activity of the cells receptors; - Recovered functional activity of cells; - Improved indicators of phagocytosis; - Normalized ability of cells to respond to exogenous stimulation; - Increased myeloperoxidase activity to 1.92; - Reduced acid phosphatase activity to 0.86; - Decreased level of cationic proteins to 1.23; - Increased number of lipid and glycogen in peripheral blood neutrophils; - Reduced adverse reactions antineoplastic therapy; - Reduced local and general radiation therapy reactions (decreased by: 43.2% dizziness, 18.7% appetite disorders, 20.3% temperature increase, 19.4% sleep disorder, 52.4% irritability, 14.6% nausea)
43.	Complex balneotherapy of patients with hypertonic disease in combination with osteoarthritis	Medical procedure (lic. no. FS 2009/172 from 01.07.2009)	Smirnova I. Levitsky E. Titskaya E. at al.	EHF-puncture with “Stella-2” apparatus as a part of complex treatment of 138 patients with hypertension and osteoarthritis.	Positive dynamics of clinical symptoms ($p < 0,01$), of central hemodynamics and cardiac indicators ($p < 0,001$), of adaptive capabilities indicators ($p < 0,05$), of blood biochemical parameters ($p < 0,009$), of physical health and psychological status indicators ($p < 0,001$). Therapy efficiency was 80%

44.	Electromagnetic radiation of millimeter range in the rehabilitation of patients with coronary artery disease	Medical procedure (lic. no. FS 2006/354 from 12.12.2006)	Levitsky E. Golosova O. Gridneva E. at al.	EHF-therapy with "CEM-TECH" apparatus (5.6 mm and 7.1 mm) as a part of complex treatment of patients with cardiac ischemia.	Antianginal effect (2,5 times less angina pectoris attacks), 3.2 times less episodes of "silent ischemia", normalization of daily monitoring indicators (in 80.0% of cases), decreased number of ventricular premature beats by 15-20%, decrease in complaints of dyscirculatory character in 90.0% of cases, improvement of electroencephalography indicators (reduced of inter-hemispheric asymmetry), improvement of blood coagulation and blood lipid spectrum. Therapy efficiency was 86.1%.
45.	Chronobiological optimization of balneotherapy of patients with hypertonic disease in Siberian region	Medical procedure (lic. no. FS 2006/078 from 10.05.2006)	Levitsky E. Smirnova I. Abdulkina N. at al.	EHF-puncture with "CEM-TECH" apparatus (60.9-61.3 GHz) as a part of complex treatment of 147 patients with hypertension.	Reduced cardialgia in 52% of cases, 3.5 times less asthenovegetative manifestations, 5.8 times decreased headaches, improved blood lipid profile ($p<0,05$), significantly improved indicators of adaptive capabilities (number of patients with a high level of reactivity increased by 3 times and with low level reactivity decreased by 3 times).
46.	Complex balneotherapy of patients with dyskinesia of the gallbladder affected by the psychoemotional stress	Medical procedure (lic. no. FS 2011/278 from 12.09.2011)	Levitsky E. Poddubnaya O. Smirnov I. at al.	EHF-therapy of BAP and a projection of a right hypochondrium with "CEM-TECH" apparatus (40-63 GHz) as a part of complex treatment of 59 patients with dyskinesia of the gallbladder (as a result of psychoemotional stress).	Positive dynamics of clinical symptoms (completely eliminated pain, nausea, heartburn, bitter taste in the mouth in 67.3% of cases, a significant decrease of their intensity in 56.9% of cases). Normalization of motor-evacuation function of the gallbladder for 74.4% of patients. Increased number of patients with higher reactivity (from 78% to 95%), improved insulin and cortisol level indicators ($p<0,04$), significant improvement of mental and emotional status ($p<0,001$). Therapy efficiency was 90.8%.

47.	EHF-therapy in the complex balneotherapy of patients with chronic cholecystitis combined with opisthorchiasis	Medical procedure (lic. no. FS 2010/187 from 09.08.2010)	Levitsky E. Beloborodova E. Poddubnaya O. at al.	EHF-therapy of liver's and gallbladder's projections (40-63 GHz) as a part of complex treatment of 61 patients with chronic cholecystitis and opisthorchosis.	93.4% of patients experienced complete elimination of clinical complaints and symptoms (pain in the right upper hypochondrium, heartburn, nausea, cystic symptoms). The improvement and normalization of functional activity via endocrine glands (volume of the gallbladder bile, the index of contractile function of the gallbladder, liver blood flow indicators, adaptive capabilities and non-specific resistance of a body levels). Therapy efficiency was 84.8%.
48.	EHF-therapy in the complex resort treatment of patients after early stage gastrointestinal cancer surgery	Medical procedure (lic. no. FS 2007/171 from 09.08.2007)	Efimenko N. Osipov Y. Kaysinova A. at al.	EHF-therapy (individual selection of frequency) of thymus's projection according to the stable procedure in continuous mode as a part of complex treatment of 60 patients after early stage cancer surgery (stomach cancer, colon cancer, pancreatic cancer, liver cancer). Essentuki resort.	Reduction or full elimination of pain in 90% of cases, reduced dyspeptic syndrome in 83,3-91,7% of cases, 88% of patients experienced reduce post-surgery anesthesia effects, reduced asthenic-vegetative manifestations in 44% of cases, improvement and normalization of the motor-evacuation function of the digestive tract for 36,7-63,3% of patients, improved metabolic indicators, hormone levels and protein-synthetic liver function indicators. Improved pancreatic functioning in 90% of cases, reduced MDA levels in 74% of cases. Significant improvement of the immune system indicators in 85,7- 86.4% of cases. Overall therapy efficiency was 81.7%.
49.	Optimization of rehabilitation of patients with osteoarthritis combined with flat feet	Medical procedure (lic. no. FS 2006/126-u from 14.06.2006)	Titskaya E. Reshetova G. Mikhailova E. at al.	EHF-therapy of BAP with "CEM-TECH" apparatus as a part of complex treatment of 53 patients with osteoarthritis and flat feet.	Significant reduction of subjective and objective symptoms of the disease. Improved heart rate index, Kerdo index and vegetative status indicators in 85.7% of cases, improved body reactivity in 64.3% of cases, the improvement and normalization of the immune status at 61,5-75% of cases. Therapy efficiency was 96.4%.
50.	Chronobiological method of the rehabilitation of patients with osteoarthritis in the	Medical procedure (lic. no. FS 2006/047 from 10.04.2006)	Levitsky E. Titskaya E. Reshetova G. at al.	EHF-therapy of BAP with "CEM-TECH" apparatus (40-43 GHz) as a part of complex treatment of 157 patients with osteoarthritis	Complaints and disease symptoms elimination in 88.6% of cases. Improved heart rate index, Kerdo index and vegetative status indicators in 85.7% of cases, improved body reactivity in 81.9% of cases.

	conditions of Siberian region using physical factors			(I-III stages).	Therapy efficiency at different seasons of the year was from 80.5% to 96.4%.
51.	A method for treating osteoarthritis with EHF-therapy	Medical procedure (lic. no. FS 2008/202 from 22.08.2008)	Menshikov T. Cherkashina L. Shlyapak E. at al.	EHF-therapy (CEM-TECH) in intermittent mode (0.1 Hz) of greater trochanter femur as a part of complex treatment of 35 patients with coxarthrosis.	Improved clinical indicators: pain elimination, increased indicators of affected joints functionality in 52-87% of cases. The positive effect had been remaining for 7-12 months in 62.5% of case.
52.	Intensive complex peloidotherapy of patients with chronic nonspecific salpingoophoritis	Medical procedure (lic. no. FS 2010/260 from 22.08.2008)	Yuryev S. Valkevich O. Ruzaeva Y. at al.	EHF-therapy (Stella-2) of BAP (59-59.2 GHz, a first half of a day) as a part of the complex treatment of 142 patients with chronic nonspecific salpingoophoritis in the stage of remission.	Improved clinical symptoms of patients (pain elimination in 83% of cases). Defibrosing effect in the form of improved motility of the uterus and appendages in 59.4% of cases. Anti-inflammatory effect (normalization of the size and structure of the uterus in 50% of cases). The improvement of menstrual function and hemodynamic indicators of the pelvic organs. Positive effect on the vegetative status and cellular immunity. The therapy efficiency was 81.8%.
53.	Intensive complex physiotherapy of patients with chronic prostatitis	Medical procedure (lic. no. FS 2010/146 from 06.08.2010)	Kolmatsuy I. Golosova O. Dostovalova O. at al.	EHF-therapy (Stella-2) of BAP (59-59.2 GHz, a first half of a day) as a part of the complex treatment of 84 patients with chronic abacterial prostatitis in a remission stage and latent inflammation.	Reduced strangury, feeling of empty gallbladder and pollakiuria. Decreased palpation pain of the prostate gland in 94.3% of cases. White blood cells number normalization of prostatic secretions. Decreased prostate size and residual urine, according to ultrasonography. The therapy efficiency in the form of improvement was 86.9%, in the form of significant improvement - 13.1%.
54.	Complex balneotherapy of patients with chronic prostatitis with erectile dysfunction	Medical procedure (lic. no. FS 2009/253 from 30.07.2009)	Kolmatsuy I. Smirnov I. Golosova O. at al.	EHF-therapy (Stella-2) of BAP (59-59.2 GHz, a first half of a day) as a part of the complex treatment of 64 patients with chronic abacterial prostatitis in a remission stage and latent inflammation, combined	Pain syndrome elimination in 89% of cases, elimination of dysuria syndrome in 81.2% of cases. Decreased strangury, feeling of empty gallbladder and pollakiuria. Normalized copulative function in the form of improved spontaneous and adequate erections, coitus time prolongation in 84.4% of cases. Decreased palpation pain of the prostate gland in 92.2% of cases. White blood cells number normalization of prostatic secretions. Decreased prostate size and residual urine,

				with erectile dysfunction.	according to ultrasonography. Improved microcirculation of penis, according to Laser Doppler flowmetry in 84% of cases. Therapy efficiency was 91%.
55.	Balneotherapy of chronic prostatitis syndrome with an additional vegetative dysfunction at an early stage of medical rehabilitation	Medical procedure (lic. no. FS 2006/352 from 12.12.2006)	Levitsky E. Zaitsev A. Kolmatsuy I. at al.	EHF-therapy (Stella-2) of BAP in a scanning mode (60.9-61.2 GHz) as a part of the complex treatment of 83 patients with chronic abacterial prostatitis with concomitant autonomic dysfunction syndrome.	Improved overall health conditions, reduced palpation pain in the prostate gland in 94% of cases, improved performance of adaptive capabilities of the body in 76% of cases, decreased cortisol level (anti-stress effect), increased insulin level and reduced of cortisol/insulin ratio (increased adaptation and recovery processes), normalized indicators of the autonomic nervous system tone, decreasing effect on traumatic events. Treatment efficiency was 92%.
56.	Millimeter waves in the treatment of patients with neurological manifestations of osteochondrosis	Medical procedure (lic. no. FS 2006/356 from 12.12.2006)	Miryutova N. Levitsky E. Mavlyautdinova I. Kozhemyakin A.	EHF-therapy (CEM-TECH) on paravertebral areas (52-78 GHz, wavelength is 7.1 mm) in an impulse mode (9.6 Hz) as a part of complex treatment of 197 patients with neurological manifestations of osteochondrosis of the spine.	Decreased clinical complaints (burning sensation, numbness, cramps, pain, coldness of extremities and sweating), decreased stiffness of the joints of the spine and extremities, muscle weakness in 86% of cases. Improved hemodynamics parameters, increased number of active painless movements, gait recovery. The effect had been remaining up to a year in 62% of cases.
57.	Electromagnetic radiation of EHF in the treatment of neuro-orthopedic disorders for patients with lumbar osteochondrosis, children and adolescents with	Medical procedure (lic. no. FS 2006/039-u from 10.04.2006)	Miryutova N. Levitsky E. Abdulkina N. Kozhemyakin A. at al.	EHF-therapy of damaged muscles areas (depending on the form of scoliosis and affected muscles) with "CEM-TECH" apparatus (52-78 GHz) in an impulse mode (10 Hz) as a part of complex treatment of 78 adolescents with 1-3 stages of idiopathic scoliosis of	1 complex: the rapid pain elimination, increased exercise tolerance, eliminated headaches, increased retention time of abdominals, normalized muscle tone, increased spine excursion in the sagittal and frontal plane. 2 complex: the positive trend of the spine functions, increased pain threshold, normalized blood biochemical parameters (sialic acids, ceruloplasmin, hydroxyproline). Increased amplitude of the M-response of all the peripheral nerves, improved hemodynamics indicators.

	idiopathic scoliosis			the spine (first complex) and 58 patients with lumbar osteochondrosis (second complex).	
58.	A method for treating Lyme disease with damaged nervous system	Russian Federation patent number 22017 42 from 10.04.2003	Zaitsev A. Abdulkina N. Levitsky E. at al.	EHF-therapy of biologically active areas of the upper part of the sternum, of the right shoulder joint, of the projection of the brachial plexus and BAP in a scanning mode (59-63 GHz) in the complex treatment of patients with Lyme disease with damaged nervous system.	Sedative effect progress. Elimination of headaches, dizziness, spine and joints pain, heart pain. Decreased intensity of the feeling of numbness in the affected hand, irritability and fatigue. Recovery of the motion ability of the spine and the joints without pain. Eliminated hypersensitivity of the lower extremities. Reduced sensitive disorder's area of the upper extremities. Normalized vegetative tone. Significant regression of pathological symptoms of the autonomic nervous system, peripheral nerves and joints. Normalization of impulses conductivity speed along peripheral nerves (EMG). Immediate treatment efficiency was 86%.
59.	A method for treating of toxicomania	Russian Federation patent number 2222313 from 27.01.2004	Lyan V. Lyan N. Votoropin S.	EHF-therapy (Stella-1, 7.1 mm) of BAP and Manipur and Svadhishthana chakra et al. in the complex treatment of 42 patients with taxicomania and physical abstinence syndrome.	Improved health: eliminated inner stress, rise of appetite, participation in domestic affairs and interest to live. The complete absence of psychological addiction to drugs was observed, satisfactory physical conditions, seemed completely normal person. There was a significant improvement of psychosomatic condition of the body. Long-lasting positive effect was observed in 41% of cases.
60.	Method of elimination of addiction to tobacco smoking	Russian Federation patent number 22270 10 from 04.07.2002	Valentik Y. Matveev E. Novikov E. at al.	EHF-therapy (Stella-1) in the reconance mode (analog of smoking tobacco) of BAT of 37 smoking patients.	Decreased tobacco addiction, stable and calm moods, a sense of tidal forces, improved sleep. The therapy effectiveness was 92%.

61.	The method of treatment of scoliosis for children and adolescents	Russian Federation patent number 22488 22 from 08.09.20 03	Miryutova N. Levitsky E. Abdulkina N. Lipina E.	EHF-therapy of damaged muscles areas (depending on the form of scoliosis and affected muscles) with "CEM-TECH" apparatus (52-78 GHz) in an impulse mode (10 Hz) as a part of complex treatment of 30 adolescents with 1-3 stages of idiopathic scoliosis of the spine	A fast regression of pain syndrome, increased exercise tolerance, eliminated headaches, increased retention time of abdominals, normalization of muscle tone, increased spine excursion in the sagittal and frontal plane.
62.	A method of treating patients with osteoarthritis	Russian Federation patent number 22564 70 from 25.11.2003	Levitsky E. Titskaya E. Reshetova G. at al.	EHF-therapy (Stella-1, 40-43 GHz) of BAT in the complex treatment of 65 patients with osteoarthritis of the hip joints, knee joints and joints of the upper extremities.	Joints pain elimination during both the motion and the rest, increased range of movements of the affected joints, significant reduction of the overall weakness and sweating. There was a normalization of the initially altered biochemical and immunological parameters of blood. The efficiency of treatment was 92%.
63.	A method of treating chronic post-traumatic stress disorders	Russian Federation patent number 22572 38 from 12.08.2003	Zaitsev A. Levitsky E. Dostovalova O. at al.	EHF-therapy (Stella-2) in a scanning mode (60,9-61,2 GHz) in complex treatment of 112 patients with symptoms of chronic post-traumatic stress disorders (according to the type of vegetative disorders).	Subjective improvement of health was proved by functional studies. Decreased serum concentration of malondialdehyde. Improved hemodynamics indicators and adaptive capabilities of the body. Reduced cortisol/insulin concentration ratio. Normalization of endocrine and vegetative status indicators.
64.	A method of treating uterine fibroids combined with mastopathy	Russian Federation patent number 22579 21 from 26.12.2002	Dikke G. Gridneva E.	EHF-therapy (Stella 2) of BAT with individual frequency selection (60-61,8 GHz) during 5th-7th day of the menstrual cycle, from 9 to 12 a.m. as a part of	Elimination of complaints. According to the ultrasound examination, decreased size of the uterus occurred in 76.4% of cases, while in 29.4% of patients experienced normalization of uterine size, cervix was observed without pathological changes, appendages were soft without pain. Significant improvement of therapeutic efficiency.

				complex treatment of 35 patients suffering from uterine myoma and mastopathy.	Improved state of the mammary glands, observed by palpation and by ultrasound or mammography in 78% of cases. The normalization of the immune status in 86% of cases.
65.	A method for preventing preeclampsia at high risk of its progress	Russian Federation patent number 22629 60 from 16.04.2004	Shatalov E. Mikheenko G.	EHF-therapy of BAP (Stella, 7.1 mm) in the morning as a part of the complex treatment of women with a high risk of developing preeclampsia.	Disorders in preeclampsia adaptation to pregnancy were corrected, vascular tone was stabilized, increase of renal excretory function, increased myocardial contractile activity. Reduction of mean arterial pressure, elimination of hidden edema, improved renal blood flow and placental system.
66.	A method for treating patients with spinal osteochondrosis combined with osteoarthritis	Russian Federation patent number 22642 40 from 05.07.2004	Miryutova N. Levitsky E. Kozhemyakin A.	EHF therapy (Stella-1, 52-78 GHz, Impulse mode - 10 Hz) of the areas of damaged joints in the treatment of 26 patients with neurological aspects of lumbar osteochondrosis with osteoarthritis of hip, knee and ankle joints.	Positive trend of the static-dynamic performance. Reduced limitation of movement of the joints in 80% of cases. Normalization of initially altered blood biochemical parameters (sialic, ceruloplasmin, hydroxyproline). The increase of amplitude of muscle potentials, improved hemodynamics indicators, positive changes in biochemical and vegetative status.
67.	The method of treatment of urogenital chlamydial infection during pregnancy	Russian Federation patent number 22841 79 from 13.04.2005	Dikke G. Arsenyev A.	EHF-therapy (Stella-1, 7.1 mm) of BAT of 35 pregnant women infected with urogenital chlamydiosis.	The threat of termination of pregnancy was eliminated in 94% of cases, the stabilization and improvement of ultrasound picture occurred in 89% of cases, colitis was cured in 98% of cases. Positive changes in terms of immune status. 91.2% of treated women had no chlamydias in the examined material. The observed group pregnancy ended with urgent parturition for 34 women. In one case premature birth happened at 35 weeks of pregnancy. There were no perinatal losses.

68.	The method of treatment of chronic prostatitis with the use of complex therapy (herbal and apparatuses)	Russian Federation patent number 22902 32 from 31.03.2005	Tikhonov I. Astashov V. Sidorova T.	Rectal EHF-therapy (Stella-1, 42-78 GHz) in the treatment of 55 patients with chronic infectious prostatitis (CIP) in the stage of remission and 45 patients in the stage of latent inflammation	Improved general condition, pain elimination, persistent erection recovery, normalization of urination, increased number of lecithin granules, reduced number of white blood cells in the prostate secretion, improved results of the sexological questionnaire "ICEF."
69.	A method of treating chronic fatigue syndrome	Russian Federation patent number 22959 46 from 04.08.2005	Sinitckiy A. Azarov N.	EHF-therapy of BAT ("Stella-1", "CEM TECH", 36-78 GHz) in the modulated low frequency mode (from 4.0 to 9.4 GHz) in the treatment of 49 workers of a production sphere.	According to the results of special tests ("Simple visual-motor reaction", "Choice reaction", "Reaction of discrimination", "Assessment of attention", "Immunity", "The response to the moving object", "Tapping-test", " Schulte-Platonov red and black table ", "Critical frequency flicker fusion", "Contact coordination assessment", "Contact coordination assessment with feedback", "Contact coordination assessment according to the profile", " Contact coordination assessment according to the profile with the feedback ", "Muscular endurance index ", "Muscular endurance index with feedback "), Increased efficiency and reduced fatigue were observed immediately after the procedure and consistent results after three months. Side effects and complications didn't appeared.
70.	A method of treating stress disorders	Russian Federation patent number 22959 87 from 04.08.2005	Sinitckiy A. Azarov N.	EHF-therapy of BAP ("Stella-1", "CEM TECH", 36-78 GHz) in the modulated low frequency mode (from 2.5 to 13.3 GHz) as a part of treatment of 74 patients with stress disorders.	Adequate adaptive response was in the form of the following: - Decrease of minute respiration volume (the main indicator of hyperventilation, which allows to make a decision about decrease in the severity of metabolic changes in the body) - Normalization of heart rate variability (increase of the total power spectrum regulation, optimization and stabilization of the sympathetic and parasympathetic ratio of the autonomic nervous system when to regulate the heart beat).
71.	A method of correcting the	Russian Federation	Sinitckiy A. Azarov N.	EHF-therapy of BAP ("Stella-1", "CEM TECH",	Quick regress of disease. According to cardiointervalometry, stabilization of the ratio of the sympathetic and

	human functional state under the stress	patent number 22965 54 from 04.08.2005		42.2 GHz) in the modulated low frequency mode (from 3.3 to 9.5 GHz) in the treatment of 62 patients after a car accident.	parasympathetic divisions of the ANS at a normal level was observed. According to the survey, stabilized psychophysiological processes of excitation and inhibition were observed.
72.	A method of treating hypothalamic syndrome	Russian Federation patent number 22997 21 from 22.08.2005	Kirgizova O. Mashanskaya A. Suturina L. at al.	EHF-therapy of BAP (Stella 2, 59-63 GHz) in the first phase of the menstrual cycle in the treatment of 15 patients with hysteroscopy.	Significantly increased efficiency of the treatment of hypothalamic syndrome with all forms of the disease (neurotrophic, vascular, disorders of thermoregulation, disorders of sleeping and wakefulness, neuroendocrine, and others). Positive therapeutic effect was observed. The improvement or normalization of laboratory indicators, including hormonal level, elimination of clinical symptoms (normalization of body temperature, decreased body mass index, blanching or elimination of stretch marks, etc.), normalization of vegetative-vascular status was achieved for 66.7% of patients.
73.	A method of treating patients with chronic opisthorchiasis	Russian Federation patent number 23076 85 from 11.01.2005	Poddubnaya O. Beloborodova E. Levitsky E. Kozhemyakin A.	EHF-therapy ("Stella-1") in the background resonance mode (52-78 GHz) in the treatment of 40 patients with chronic opisthorchiasis.	Complete pain, dyspeptic and asthenovegetative syndromes elimination. "Cystic symptoms" elimination. According to the ultrasound examination normalized volume characteristics and the contractility of the gallbladder were observed. The improvement in colloidal stability of bile (Holat-cholesterol coefficient, Rubens index). Improved indicators of adaptive capabilities of the body. Normalization of blood biochemical parameters and indicators of renal hemodynamics.
74.	A method of treating erectile dysfunction affected by hypertonic disease for patients with chronic prostatitis	Russian Federation patent number 23230 18 from 24.07.2006	Kolmatsuy I. Levitsky E. Smirnov I. at al.	EHF-puncture (Stella-1, 59.0-59.2 GHz) as a part of complex treatment of 45 patients with erectile dysfunction.	Eliminated pain (88%, 75%) and dysuria (80%, 60%), syndromes, improved general conditions. At the same time there were a decreased strangury, feeling of incomplete emptying of the bladder, night pollakiuria, which leads to decrease in total IPSS score from 15 to 6 points and reduced quality of life QOL assessment index from 5 to 2. The total score of the questionnaire NIH CPSI was reduced from 17 to 8

					<p>points. The normalization of sexual function appeared in the form of spontaneous and adequate erections, coitus time extension, which increased the total IIEF-5 score from 14 to 21 points. According to digital rectal examination, the prostate had decreased in the size, tenderness, focal infiltration, tone normalization. There was a positive dynamics of prostatic secretions: the normalization of white blood cell number, an increase in the number of lecithin granules. Echoscropy examination showed prostate volume decrease by 3.4 cm³, the improvement in echo-structure, absence of residual urine. The level of prostate-specific antigen after treatment was not significantly increased.</p> <p>Increased adaptation reactivity of the body.</p> <p>Increase microcirculation indicator.</p> <p>Increased functional activity of the vascular endothelium.</p> <p>Increased microcirculation indicators was observed for 85% (p> 0.05) of patients of the main group.</p>
75.	A method of treating pathological addiction to negative factors	Russian Federation patent number 23352 77 from 16.04.2007	Butsko A.	EHF-therapy (Stella-1) of BAP in the background resonance mode in the complex treatment of 980 patients with pathological addictions.	<p><u>Treatment of alcoholism</u></p> <p>- A significant improvement of health status, eliminated symptoms of abstinence and the consequences of the use of medicines, symptoms alcohol addiction.</p> <p><u>Treatment of nicotine addiction (smoking)</u></p> <p>- Calm mood, improved sleeping, eliminated tobacco addiction, significantly improved well-being.</p> <p><u>Treatment of drug addiction</u></p> <p>- Satisfactory stable conditions, stable mood, symptoms of a drug addiction didn't appear. Improved relationships at work and at home. There was remaining stable remission for 24 months.</p>

					<p><u>Treatment of gambling addiction</u></p> <p>- Good feeling, attraction to the game was missing for 24 months.</p> <p><u>Treatment of pathological food addiction (obesity)</u></p> <p>- Good health, decreased appetite (especially in the evening), improved health and mood, significant weight loss during six months after the first course of therapy.</p>
76.	The method of treatment of vegetative-vascular dystonia for adolescent girls	Russian Federation patent number 236253 7 from 30.04.2008	Dolgikh V. Mashanskaya A. Kirgizova O. Dolgikh L.	EHF-therapy (Stella 2, 59-63 GHz) of BAP from 10 a.m. to 1 p.m. in the treatment of 25 patients with vegetative-vascular dystonia.	<p>Significantly reduced symptoms of fatigue, headaches.</p> <p>The following had been observed: normalization of blood pressure, bioelectric activity (EEG) and indicators of autonomic reactivity (cardiointervalography); the biochemical analysis of blood showed normalization of the level of TC, TG, and alkaline phosphatase.</p>
77.	A method of preventing placental insufficiency with gestational autohemodilution	Russian Federation patent number 23750 87 from 08.04.2008	Kavunova O. Mikheenko G. Agarkova L.	EHF-therapy (Stella-1, 57 GHz) of the projection area of vascular bundle at the elbow for the prevention of placental insufficiency of 30 women with gestational autohemodilution (12-20 week of pregnancy).	The method allows to correct violated processes of adaptation to pregnancy for women with gestational autohemodilution, to improve microcirculation in the placenta, to activate the antioxidant system of the body, blocking lipid peroxidation, which is effective for the prevention of placental insufficiency at high risk for its development. Pregnancy ended urgent spontaneous labor (alive baby with 8 points of Apgar score).
78.	A method of treating adolescents with the syndrome of vegetative-vascular dystonia of sympathicotonic type or primary hypertonic disease	Russian Federation patent number 23903 23 from 05.03.2009	Dolgikh V. Mashanskaya A. Kirgizova O. at al.	EHF therapy (Stella 2, 59-63 GHz) of BAP from 10 a.m. to 13p p.m. as a part of complex treatment of 38 patients with vegetative-sympathicotonic dystonia and arterial hypertension.	<p>According to laboratory tests: fatigue manifestations was reduced, headaches were eliminated.</p> <p>The following had been observed: stabilization of blood pressure; normalization of autonomic reactivity (cardiointervalography).</p> <p>Biochemical analysis of blood showed normalization of the level of TC, TG, and alkaline phosphatase.</p>

79.	A method for treating female infertility after viscera-conserving surgery	Russian Federation patent number 24030 06 from 15.10.2008	Melnikova T. Gordon K.	EHF-therapy (Stella-1 BF, mode №22) of paired uterine reflexogenous points and ovaries of 29 women aged from 20 to 35 years, 3-13 months after viscera-saving surgery due to the conservative myomectomy or (and) external endometriosis.	Improved overall health: elimination of lower abdominal pain, headaches, irritability and significant reduction tearfulness, dizziness. Improved psycho-emotional state and the tone of the ANS. 83% of the women experienced increase in the number of follicles; echo-indicators correspond to the phase of the menstrual cycle for 92% of the women. According to Doppler echocardiography examination improvement in blood flow in the ovarian arteries was reported in 92% of cases. Efficiency was 86.3%
80.	A method of treatment of fibrocystic breast disease for gynecological patients	Russian Federation patent number 24055 98 from 20.02.2009	Dikke G. Karagulyan O. Silantyeva E. Kurchishvili V.	EHF-therapy ("CEM TECH-BF", 7.1 mm) of the reflexogenous area of the cervix (vaginal procedure) in the treatment of 87 patients with fibrocystic breast disease and related genital disease.	Improved flow of fibrocystic breast disease by reducing the volume of hyperplastic cells of the breast tissue and reducing the proliferative activity of the epithelium due to recovery of adaptive reserves of the organism. Overall clinical efficiency of therapy of fibrocystic disease was 86%.
81.	Psychophysiological method of treatment of adolescents with primary arterial hypertension biofeedback therapy and EHF-puncture	Russian Federation patent number 24126 85 from 04.05.2009	Kolesnikova L. Dolgikh V. Mashanskaya A. at al.	EHF-therapy (Stella 2 60.9-61.1 GHz) of BAP in the treatment of 26 patients diagnosed with primary arterial hypertension.	The positive effect on the EEG, namely: - regression of the slow paroxysmal activity (18% of patients), the appearance of the regular alpha rhythm (25.6% of patients); - cardiointervalography: increased the number of normal parameters of autonomic reactivity for 56.4% of patients. According to the results of psychological research, 80% of patients had decreased level of anxiety, of emotional stress, increased self-esteem, decreased level of depression.
82.	A method of treating abnormal mental states	Russian Federation patent number 24230	Butsko A.	EHF-therapy (Stella-1, background resonance mode) of BAP in the complex treatment of 380	<u>Psychogenic depression.</u> - The mental state were gradually improved till recovery of the normal state of health. After 4 months of combined

		<p>98 from 11.01.2010</p>		<p>patients aged 18 to 73 years with abnormal mental conditions.</p>	<p>therapy, taking into account the stability of mental state, the mutual decision to stop the therapy were made. The assistance did not apply after the therapy. Mental and somatic conditions had been remaining stable during the following two years after the therapy.</p> <p><u>Sustainable anxious depression.</u></p> <ul style="list-style-type: none"> - Satisfactory stable condition. Mental and somatic conditions had been remaining stable during the following three years after the therapy. <p><u>Mixed depression.</u></p> <ul style="list-style-type: none"> - The mental state had improved and become more stable after 5 months of therapy. Other symptoms gradually reduced as well, first mental, then - somatic. The assistance did not apply after the therapy. Mental and somatic conditions had been remaining stable during the following two years after the therapy. <p><u>Neurosis of anxiety.</u></p> <ul style="list-style-type: none"> - The mental state gradually improved, anxiety was decreasing. Condition remained stable during a year after the therapy. <p><u>Agoraphobia.</u></p> <ul style="list-style-type: none"> - Mental and somatic conditions had been remaining stable during the following three years after the therapy. There were no any agoraphobia attacks again. <p><u>Post-traumatic stress disorder.</u></p> <ul style="list-style-type: none"> - Mental and somatic conditions had been remaining stable during the following four years after the therapy. <p><u>Insomnia of inorganic etiology.</u></p> <ul style="list-style-type: none"> - The assistance did not apply after the therapy. Mental
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					and somatic conditions had been remaining stable during the following two years after the therapy.
83.	A method of treating patients with osteoarthritis	Russian Federation patent number 24329 73 from 12.04.2010	Kulishova T. Karkavina A. Viktorova R.	EHF-therapy ("CEM TECH" 5,6mm) of the damaged joint along the joint gap, according to transverse procedure simultaneously with two emitters in the complex treatment of 107 patients with osteoarthritis.	All the patients experienced eliminated or decreased pain syndrome, eliminated night rest pain, significantly reduced pain in the affected joint with a load, there was a positive trend in the complaints of morning stiffness, an increase in movements volume. Improved indicators of functional performance tests. Significantly reduced size of the affected joints. Significant improvement of hemodynamics indicators. Registered decrease in the thickness of the synovial membrane of the knee joint by 54.8%, the amount of effusion in the joint cavity decreased by 42.8%. Improved physical, psychological and social functioning of patients according to life quality questionnaire («SF-36").
84.	A method of treating dyskinesia of the gallbladder with chronic phsychoemotional stress	Russian Federation patent number 24559 70 from 27.12.2010	Poddubnaya O. Ugolnikova O. Levitskaya T.	EHF-therapy (CEM TECH-BF, 40-63 GHz) of the right hypochondrium and sternum in the treatment of 99 patients of working age with gallbladder dyskinesia background affected by chronic phsychoemotional stress.	Significantly reduced clinical complaints, significantly improved performance of the functional activity of the biliary system, liver blood flow indicators, indicators of adaptive capabilities of the body and vegetative psycho-emotional status indicators. Therapeutic efficiency was 96.2%.
85.	A method of treating patients with gallbladder's dyskinesia	Russian Federation patent number 24869 09 from 29.07.2011	Poddubnaya O. Ugolnikova O. Skurlatov I.	EHF-therapy (CEM TECH- BF, 40-63 GHz) of the right hypochondrium and sternum in treatment of 57 patients with gallbladder dyskinesia.	Significantly reduced clinical complaints and symptoms of the disease, improved and normalized indicators of functional activity of the biliary system, indicators of adaptive capabilities of the body. Therapeutic efficiency was 92.6%.

86.	A method of rehabilitation of patients with osteoarthritis	Russian Federation patent number 25025 01 from 11.10.2012	Totrov I. Khetagurova Z. Ambalov S. Kupeeva A.	EHF-therapy (Stella-1, 40-43 GHz) of BAP in the complex treatment of 188 patients with osteoarthritis.	Significant improvement of life quality, eliminated pain syndrome, a significant improvement in joint syndrome, reduction of disability days, extension of the period of clinical remission, reduced frequency of exacerbations of the disease in all patients with osteoarthritis. Therapeutic efficacy was 100% (improvement – 112 patients (59%), a significant improvement – 76 patients (41%).
87.	A method of treating patients with gallstone disease after gallbladder's surgery	Russian Federation patent number 51923 64 from 09.04.2013	Marching S. Poddubnaya O.	EHF-therapy ("CEM TECH- BF", 40-63 GHz) of epigastric area, left and right hypochondrium along middle-clavicular lines and sternum in the complex rehabilitation of 25 patients after cholecystectomy.	Positive trend of clinical symptoms, all laboratory parameters, indicators of psychological status and adaptive capabilities of the body. Therapeutic efficiency was 90.5%.
88.	A method of preventing chronic inflammatory diseases of the uterus in women in post-abortion period	Russian Federation patent number 22244 98 from 27.12.2002	Kuleshov V. Shaklein A. Marinkin I. at al.	EHF-therapy (STELLA-1 BF, 42-78 GHz, impulse mode - 0.01 Hz) of BAP of 117 patients after tool scraping of the uterine for medical reasons.	Improved well-being, the disappeared of heaviness in the abdomen, improved appetite and sleep. a significant reduction of the uterus size was found on the third day (ultrasound examination). Clinical recovery for women occurred in 100% of cases.
89.	A method of correction of nutritional needs at alimentary obesity	Russian Federation patent number 22270 09 from 04.07.2002	Valentik Y. Matveev E. Novikov E. Sinitckiy A.	EHF-therapy (Stella 1, 40-100 GHz, resonance background mode) of BAP in the treatment of 42 people with overweight (alimentary obesity).	Eliminated and significantly decreased thirst, shortness of breath, irritability, daytime drowsiness, apathy. Increased work efficiency, a desire to communicate with others, normalization of eating behavior, a significant improvement in metabolic and behavioral reactions. Therapeutic efficiency was 89%.
90.	The features of apparatus' therapy in the early rehabilitation of	Sbornik nauchnykh trudov po itogam III	Poddubnaya O. Marching S.	EHF-therapy (CEM-TECH) of the right hypochondrium and the lower part of the sternum	Pain elimination for 78.9% of patients, a positive effect on biochemical blood indicators, improved hepatic blood flow by 51.7%. Normalization of vegetative and psycho-emotional status, indicating a significant decrease in the

	patients after cholecystectomy	Mezhdunarodn oy nauchno-prakticheskoy konferentsii "Problemy meditsiny v sovremennykh usloviyakh", Kazan, 2016 no. 3, p. 20-23		of 108 patients with cholelithiasis after a surgery.	emotional stress and the overall stress levels. Efficiency was 94.8%.
91.	Possibilities of non-pharmacological correction of psycho-vegetative status of young patients with clinical symptoms of irritated bowel syndrome	Sbornik nauchnykh trudov po itogam III Mezhdunarodn oy nauchno-prakticheskoy konferentsii "Problemy meditsiny v sovremennykh usloviyakh", Kazan, 2016 no. 3, p. 39-30	Poddubnaya O. Privalov N.	EHF-therapy (CEM-TECH) in the treatment of 32 young patients with clinical symptoms of irritated bowel syndrome.	Elimination of complaints (abdominal discomfort, bowel movement disorders and so on.) in 75% of cases, the rest of the patients had significantly decreased complaints intensity (25%). Indicators of adaptive abilities, vegetative and psycho-emotional status also showed positive trend. 59.3% of patients had improved quality of life to a higher level and 28.1% - to the level above the average.
92.	The method of complex chrono-rehabilitation of patients with chronic cholecystitis	Sbornik nauchnykh trudov po itogam III Mezhdunarodn oy nauchno-prakticheskoy konferentsii "Problemy meditsiny v	Poddubnaya O.	EHF-therapy (Stella-1, background resonance mode) of the right hypochondrium and sternum in the complex rehabilitation of 123 patients with chronic cholecystitis taking into account the chronobiological	Fully eliminated or significantly reduced intensity of the clinical manifestations of the disease. The improvement and normalization of the motor-evacuation function human internal secretion glands (contractile function of the gallbladder), the biochemical structure of the gallbladder bile (phospholipids, bilirubin and cholesterol) and indexes of lithogenicity bile. Increased indicators of adaptive abilities. Quality of life is significantly increased. Therapeutic efficiency was 87.9%.

		sovremennykh usloviyakh”, Kazan, 2016 no. 3, p. 31-34		characteristics of the functioning of biliary system.	
93.	Influence of EHF-therapy on the structure of bile of patients with chronic cholecystitis combined with opisthorchiasis	“Fisioterapiya. Balneologiya i Reabilitatsiya” journal. 2015, vol. 5, no. 6, p. 24-28	Poddubnaya O.	EHF-therapy (Stella-1, 52-78 GHz) of the right hypochondrium and sternum in the complex treatment of 128 patients with chronic cholecystitis and opisthorchiasis.	A significant reduction of clinical complaints and symptoms. A significant improvement in the biochemical structure of the gallbladder bile (phospholipids, bilirubin and cholesterol) and indicators of the colloidal stability of bile (lithogenicity indexes) after the normalization of functional activity human internal secretion glands.
94.	The relation of the therapeutic effectiveness with features of non-drug treatment of patients with chronic cholecystitis	Questions balneology, physiotherapy and medical physical training . 2016. T. 93. number 4 . S. 36-41.	Poddubnaya O.	EHF-therapy (Stella 1 52-78GHz) of the right hypochondrium and sternum in the complex treatment of 301 patients with chronic cholecystitis.	Eliminated clinical complaints and symptoms. Significantly improved indicators of functional activity of the human internal secretion glands, of the biochemical structure of the gallbladder bile and colloidal stability bile indicators. increased indicators of adaptive abilities. Therapeutic efficiency was 81.3% to 87.9%.
95.	The relation of effectiveness with features of early postoperative rehabilitation of patients with cholelithiasis	“Voprosy balneologii, fisioterapii i lechebnoi fizkultury”, journal, 2015, no. 1, p. 8-13	Poddubny O. Marsheva S.	EHF-therapy (CEM-TECH-BF, 40-63 GHz) of 2 projection area (one by one, area of the right hypochondrium, and the lower part of the sternum) in the complex treatment of 108 patients with cholelithiasis after cholecystectomy.	Pain elimination in 78.9% of cases, improved performance of hepatic blood flow. Normalization of vegetative and psycho-emotional status, indicating a significant decrease in the emotional stress and overall stress levels. Efficiency was from 85.7% to 94.8%.