

Fragaria & Frangula Combination (FIBROMELT)

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ABSTRACT

The article will present the indications, analyze of the component actions, cautions, and contraindications of the herbal formula Fragaria & Frangula Combination / Fibromelt /. The indications and analyze of the component actions will be done from the points of view of the Western and Traditional Chinese Medicines. The medical information of the Fragaria & Frangula Combination / Fibromelt / effectivity is done on the base of the 35 years practice of the author.

Keywords

Fibromyalgia relief, Natural pain relief, Herbal remedy for pain, Fragaria supplement, Frangula benefits.

Introduction

Fragaria & Frangula Combination / Fibromelt / is the herbal formula created on the base of the Traditional Bulgarian Medicine. Bulgaria has the thousand-years old history of the selection, cultivation, and export of the medical herbs, same as the China.

Indications and Analyze of the Component Actions**Indications**

Western medicine - Fibromyoma of the uterus with the chronic infection, menstrual over bleeding, and bleeding between the menstruation.

Traditional Chinese medicine - Heat and blood stasis in the uterus; phlegm congelation in the uterus.

Effects: Antibacterial, anti-inflammation, hemostatic, formation dissolving, anti-anemia, alleviating premenstrual and menopausal symptoms, regulate menstruation cycle, antioxidant, antianxiety, and antidepressant effects.

Analyze of the Component Actions

In Fragaria & Frangula Combination / Fibromelt / are included the next herbs:

Folium Fragaria vesca / Strawberry alpine /

Herba Hypericum perforatum / St John's wort (stalks) /

Folium Calendula arvensis / Calendula (flower) /
Cortex Frangula alnus / Glossy buckthorn (bark) /
Herba Polygonum hydropiper / Bachelor's buttons (stalks) /
Flower Matricaria chamomilla / Chamomile (flower) /
Folium Urtica dioica / Common nettle (leaves) /
Herba Achillea millefolium / Yarrow stalks/

Folium Fragaria Vesca / Strawberry alpine / [1,2]

Compounds: Caffeic acid derivatives, flavonoids: rutin, quercetin, tannins: ellagic acid tannins, oligomeric proanthocyanins, organic acids, and Vit C.

Effects: astringent and diuretic

Indications: Metrorrhagia, anemia, gastritis, enterocolitis, diarrhea, jaundice, catarrh of the respiratory and urinary tracts, kidney stones, gout, rheumatoid arthritis, nervous tension, hysteria, insomnia, hypertonia, and eczemas.

Cautions and adverse effects: No adverse effects with the administration of therapeutic doses. Not to be used during pregnancy.

Daily dosage: 1 to 2 g per day

Herba Hypericum Perforatum / St John's wort (stalks)/ [1,2]

Compounds: Anthracene derivatives: naphthodianthrones, hypericin, pseudo hypericin; flavonoids: hyperoxide, quercitrin, rutin, isoquercitrin, amentoflavone; xanthenes; acylphloroglucinols; volatile oil; oligomers; procyanidines and other catechin tannins; imanin; carotin, choline, caffeic acid derivatives, and Vit C.

Effects: Anti-anxiety, antidepressant, alleviating premenstrual and menopausal symptoms, hemostatic, anti-inflammatory, antibacterial, antifungal, antineoplastic, antioxidant, neuroendocrine, weight loss, and wound-healing effects.

Indications: Anxiety, depression, white vaginal discharge, wounds and burns, bronchitis, asthma, enuresis, gout, rheumatism, and dermatosis

Cautions and adverse effects: Contraindicated in the pregnancy as well as in a history of the photosensitivity or hypersensitivity to *Hypericum perforatum*. Decreasing activity of the irinotecan, protease inhibitors, amiodarone, anticoagulants, cyclophosphamide, cyclosporine, darunavir, etoposide, phenytoin, tamoxifen, benzodiazepines, beta-adrenergic blockers, calcium channel blockers, digoxin, statin medications, estrogen medications, methadone, nortriptyline, omeprazole, theophylline, tramadol, verapamil, and iron. Increasing activity of the rasagiline, selegiline, anesthetics, erlotinib, imatinib, monoamine oxidase inhibitors, SSRI, antidiabetic agents, buspirone, nefazodone, opioid analgesics, and venlafaxine.

Daily dosage: 2 to 4 g taken 3 times daily for the dried herb.

Folium Calendula Arvensis / Calendula (flower) / [1,2]

Compounds: Triterpene saponins, triterpene alcohols, flavonoids, hydroxycoumarins, carotenoids, volatile oil, water-soluble polysaccharides, and polyynes.

Effects: Anti-inflammatory, antimicrobial (*Staphylococcus aureus*, *Klebsiella pneumoniae*, *Sarcina lutea*, *Candida monosa*), antiviral (HIV, vesicular stomatitis virus, Rhinovirus), spasmolytic, choleric, antilipid, antihypertensive, dermatitis, and wound-healing effects.

Indications: Inflammatory conditions of the internal organs, dysmenorrhea, irregular menstruation, stomach and intestinal ulcer, constipation, cholecystitis, atherosclerosis, wounds, and inflammatory skin diseases.

Cautions and adverse effects: No adverse effects with the administration of therapeutic doses.

Daily dosage: 1 to 2 g

Cortex Frangula alnus / Glossy buckthorn (bark) / [1,2]

Compounds: Anthracene derivatives, naphthalene derivatives, and peptide alkaloids.

Effects: Anti-absorptive effects

Indications: Constipation, hemorrhoids

Cautions and adverse effects: Not to be used during pregnancy and nursing. Not to be used in the intestinal obstruction and acute intestinal inflammations. Can cause hypokalemia.

Daily dosage: 20 to 180 mg

Polygonum hydropiper / Bachelor's buttons stalks / [1,2]

Compounds: Flavonoid glucosides, polygopeparin, tannins, phytostirings, organic acids, Vit C, Vit K, etheric oil, and others

Effects: Hemostatic, analgetic, and antibacterial effects

Indications: Bleeding from the gastrointestinal tract, metrorrhagia, white discharge from uterus

Cautions and adverse effects: No adverse effects with the administration of therapeutic doses.

Daily dosage: 3 to 6 g daily

Flower Matricaria Chamomilla / Chamomile (flower) / [1,2]

Compounds: Volatile oil, sesquiterpene lactones, flavonoids, caffeic and ferulic acid ester, polyynes, coumarin, apigenin, matricin, herniarin, choline, Vit A, and Vit C.

Effects: Antibacterial (gram-positive bacteria, dermatomycoses), hemostatic, analgetic, spasmolytic, cholagogue, and anti-anxiety effects.

Indications: Menstrual complaints – dysmenorrhea, nervousness, metrorrhagia, white vaginal discharge, hematuria, bloating, fullness, spasmodic gastrointestinal disturbances, hysteria, inflammation of the mouth, throat, rhinitis, toothache, earache, headache, and influenza.

Cautions and adverse effects: No adverse effects with the administration of therapeutic doses. Not to be used during pregnancy.

Daily dosage: 3 g

Folium Urtica dioica / Common nettle (leaves) / [1,2]

Compounds: Histamine, serotonin, acetylcholine, formic acid, leukotrienes, flavonoids, silicic acid, volatile oil, and potassium-ions.

Effects: Hemostatic, hemopoietic, anti-inflammatory, analgetic, and anti-arthritis effects

Indications: Metrorrhagia, acne, infections of the urinary tract, kidney, and bladder stones, pulmonal and gastric hemorrhages, hemorrhoid, decreased lactation, and rheumatism.

Cautions and adverse effects: No adverse effects with the administration of therapeutic doses. Not to be used during pregnancy. Gastric irritation. Must be separated 1-2 hours from the iron medications.

Daily dosage: 8 to 12 g

Achillea millefolium / Yarrow stalks/ [1]

Compounds: Volatile oil, sesquiterpene lactones, polyynes, alkamids, flavonoids, betaine

Effects: Cholagogue, spasmolytic, cardiovascular (lowered blood pressure, decreased LDL and triglycerides, and increased HDL), anti-edema, anti-inflammatory, and antimicrobial effects (*Escherichia coli*, *Salmonella typhosa*, *Shigella sonnei*, *Staphylococcus aureus*, *Candida albicans*)

Indications: Loss of appetite, spastic gastrointestinal discomfort, liver, and gall bladder disorders (cirrhosis, dyslipidemia, bile stasis), hypertonia, bleeding hemorrhoids, and menstrual problems.

Cautions and adverse effects: Not to be used during pregnancy and breastfeeding

Daily dosage: 4.5 g

Cautions and Contraindications

Not recorded in the proper administration. Not to be used during the pregnancy.

Daily Dosage: 1 to 2 capsules

Chemical Analysis

The *Fragaria* & *Frangula* Combination / *Fibromelt* / had a chemical and antibacterial analysis in the Technology Center of the Plovdiv University “Paisii Hilendarski” EOOD, Bulgaria, by prof. Ilia Iliev

Methods of Analysis

Determination of the total polyphenolic content by the method of Singleton and Rossi

Determination of the total flavonoid content by spectrophotometric method with AlCl₃ (Aluminium chloride)

Quantification of condensed tannins using the methyl cellulose precipitation method

Quantification of polyphenolic substances, representatives of the group of phenolic acids, flavonoids and tannins using the HPLC method (High-performance liquid chromatography)

Quantification of arbutin according to the European Pharmacopeia 10.0

Determination of antioxidant activity using the DPPH method

LC-Mass Spectrometry analysis

The chemical analysis of the *Fragaria* & *Frangula* Combination / Fibromelt / shows the existing of the many useful chemical substances. The chemical substances with the highest concentration are grouped according to their physiological effects:

Effects of the Isolated Chemical Substances

Antibacterial – Gallic acid (*Campylobacter*, *Escherichia coli*, *Listeria monocytogenes*, and *Staphylococcus aureus*, *Streptococcus mutans*, *Pseudomonas*) [3-5]; Syringic acid [6]; Quercetin (*Pseudomonas aeruginosa*, *Salmonella enteritidis*, *Staphylococcus aureus*, *Escherichia coli*, *Proteus*, and *Aspergillus flavus*, *Candida albicans* and antiparasitic properties *Leishmania*, *Trypanosoma*, and *Plasmodium*) [7-9]; Kaempferol [10-12]; Isorhamnetin (*Influenza virus*, *Staphylococcus aureus*, *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus*, *Staphylococcus aureus* and *Bacillus*, *Mycobacterium tuberculosis*) [13-15]; Rutin (*Escherichia coli*, *Proteus vulgaris*, *Shigella sonnei* and *Klebsiella sp*, *Pseudomonas aeruginosa* and *Bacillus subtilis*; *Mycobacterium smegmatis*; Antifungal activities - *Candida gattii*; Antimalarial activity - *Plasmodium (Bennettinia) juxtannucleare*, *Plasmodium falciparum*) [16-19]; Aucubin (*Staphylococcus epidermidis*, *S. aureus*, *Enterococcus faecalis*, and *Bacillus subtilis*, *Proteus vulgaris*, *Enterobacter aerogenes*, *Klebsiella pneumoniae*, *Proteus mirabilis*, and *Citrobacter diverse*, *Candida albicans*) [20-22].

Anti-inflammation – Gallic acid [3-5]; Chlorogenic acid; Caffeic acid; P-coumaric acid; Salicylic acid; Syringic acid [6]; Quercetin [7,9]; Myricetin; Kaempferol [10-12]; Isorhamnetin [13-15]; Rutin [16-19]; Aucubin [20,22-24]; Catalpol [25-28].

Antioxidant - verified with antioxidant analyze – (TPC –total polyphenol content, mg GAE/g – equivalent of gallic acid: 21.1; IC₅₀ DPPH mg GAE/g 15 min: 10.6; EC₅₀ CUPAC mg GAC/g: 6.3; EC₅₀ FRAP mg GAC/g: 21.1); Gallic acid [3-5]; Chlorogenic acid; Caffeic acid; P-coumaric acid; Syringic acid [6]; Quercetin [7,9]; Kaempferol [10-12]; Isorhamnetin [13-15]; Rutin [16-19]; Aucubin [20,23]; Catalpol [25-28].

Hemostatic – tannins: Gallic acid [3,29]; Caffeic acid; flavonoid: Myricetin; Isorhamnetin [14]; Rutin [16,18].

Formation dissolving – Gallic acid [3,4,30-32]; Chlorogenic acid; Caffeic acid; Syringic acid [6]; Quercetin [7,33,34]; Myricetin; Kaempferol [10,11]; Isorhamnetin [14,35,36]; Rutin [16,18,19,37]; Aucubin [20,23,24]; Catalpol [25-27].

Antianxiety – Gallic acid [3,4,38,39]; Chlorogenic acid; Caffeic acid; Quercetin [7,40]; Kaempferol [41,42]; Isorhamnetin [14]; Rutin [16,18,43]; Aucubin [20,44]; Catalpol [25,26,28]

Antidepressant - Gallic acid [3,4,38,39]; Chlorogenic acid; Caffeic acid; Quercetin [7,40]; Kaempferol [41,42]; Isorhamnetin [14]; Rutin [16,18,43]; Aucubin [20,44]; Catalpol [25,26,28]

Methods and Methodology

For the article were analyzed 63 women, ages ranging from 27 to 68 years of age. The period of administration of *Fragaria* & *Frangula* Combination / Fibromelt / was from 2 months to 1 year and 11 months, in the dose 1 capsule daily. All women were diagnosed with fibromyoma (CA 125 was negative for all women). The size of the fibromyomas were from 0.9 to 7.3 cm. The quality of the menstruation regularity, dysmenorrhea, metrorrhagia, spotting between or around menstruation, premenstrual syndrome (headache, nervousness, insomnia), and the relapse of the fibromyoma were analyzed for every one woman. The follow up period of the patients were 10 years. Nine of the women with the fibromyoma were in the climax. The size of the cysts was measured by the Ultrasound diagnostic apparatus – LOGIQ P6.

Results

The 39 patients have fully dissolved of the fibromyoma nodule, 24 patients have 22.7 – 85.7% decreasing at the size, and 0 patients had no response to the therapy ($p < 0.1$). The relapse of the fibromyomas was found at 6 women, with much less size. Five of them were dissolved again by *Fragaria* & *Frangula* Combination / Fibromelt / and 1 which was not responded had surgical removal. The other clinical symptoms that were analyzed in the treatment with the *Fragaria* & *Frangula* Combination / Fibromelt / were the irregularity of the menstruation, metrorrhagia, dysmenorrhea, and pre-menstrual symptoms. The 6 women had the irregular menstruation (5 with earlier menstruation, before 21 days and 1 woman with late menstruation, after 30 days). All women recovered the regularity of the menstruation after 2 to 4 months therapy ($p < 0.4$). The 20 women had dysmenorrhea (slight to very strong menstrual cramps and pain). The 16 women were without of the menstrual pain and cramps and 4 women were with the decreased menstrual pain and cramps after the therapy ($p < 0.4$). The 35 women were with metrorrhagia (over bleeding at the menstruation, with blood clots, 5 to 15 days bleeding; 6 women were with perimenstrual spotting; 3 women with ovulation spotting). The 32 women recovered the normal menstrual bleeding (3 to 7 days without blood clots), 3 women had decreased menstrual bleeding, with less blood clots (with normal menstrual duration), and no one had the spotting before or at the middle of the menstruation cycle ($p < 0.3$). The 6 women had the premenstrual syndrome (6 with headache and nervousness and 1 with breast pain). After the therapy, all women were without the premenstrual symptoms.

Table 1 represents summarized result of the therapy with the *Fragaria & Frangula* Combination / Fibromelt /

Clinic symptoms	Full number	Fully compensated	Partial compensated
1. Fibromyoma	63	39	24
1. Irregular menstruation	6	6	
* Earlier menstruation	5	5	
* Late menstruation	1	1	
2. Metrorrhagia	35	32	
* Spotting around and between the menstruations	9	9	
3. Dysmenorrhea	20	16	4
4. Premenstrual syndrome (headache, nervousness, and breast pain)	6	6	

Analyzes

The *Fragaria & Frangula* Combination / Fibromelt / is effective to dissolve the uterine fibromyomas (61.9 %), to stop the metrorrhagia, spotting around and between the menstruations (91.4 %), to prevent the dysmenorrhea (80.0 %), as well as to regulate the menstruation and premenstrual syndrome.

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