

SUPPLEMENTAL MATERIAL

A multidisciplinary approach to functional somatic syndromes: study protocol for a population-based prospective cohort study

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Table 1. Laboratory tests and instruments used in ISFUN study.

Laboratory test	Baseline	First follow-up	Second follow-up	Third follow-up	Equipment [Laboratory kit provider]
Complete blood count	*	*	*	*	XN-1000 Hematology Analyzer, Sysmex
Fasting blood glucose Serum cholesterol Triglycerides LDL/HDL cholesterol cholesterol Aspartate aminotransferase (AST) Alanine aminotransferase (ALT) Alkaline phosphatase test (ALP) C-reactive protein (CRP)	*	*	*	*	Cobas c 311 analyzer, Roche [Roche diagnostics]
Blood urea nitrogen Serum creatinine, calcium, magnesium, iron	*				Cobas c 311 analyzer, Roche [Roche diagnostics]
Serum ferritin	*	*	*	*	Cobas e 411 analyzer, Roche [Roche diagnostics]
Thyroid-stimulating hormone (TSH)	*				Cobas e 411 analyzer, Roche [Roche diagnostics]
Serum zinc	*				BS800M chemistry analyzer, Mindray [Greiner diagnostic]
25-hydroxy vitamin D	*				HPLC 3345, Rigol-Shimadzu
Blood DNA extraction	*				PrimePrep Genomic DNA Isolation Kit (from Blood) - GeNet Bio
Stool DNA extraction	*				QIAamp Fast DNA Stool Mini Kit - QIAGEN
Verifying DNA sample quality	*				NanoDrop OneC Spectrophotometer, Thermo Scientific
Gel Documentation Imaging	*				E-BOX CX5 TS-20.M, Vilber Lourmat
Urine metabolome	*	*	*	*	Mass spectrometry (GC-MS)

Table 2. Phenotype assessment tools and evaluation schedule in ISFUN study.

Assessment tools	Baseline	First follow-up	Second follow-up	Third follow-up	Assessed disorders/phenotypes
Functional somatic syndromes					
Screening for somatoform symptoms[1]	*	*	*	*	Somatization
Somatic symptom disorder-B criteria scale[2]	*	*	*	*	Symptom-related thoughts, feelings and behaviors
Functional gastrointestinal disorders (FGID) symptoms checklist[3,4]	*	*	*	*	Functional globus, functional heartburn, functional dyspepsia, irritable bowel syndrome, functional constipation, functional diarrhea, centrally mediated abdominal pain, functional abdominal pain syndrome
Non-cardiac chest pain checklist	*	*	*	*	Non-cardiac chest pain
Low back pain checklist	*	*	*	*	Low back pain
Fibromyalgia diagnostic criteria[5]	*	*	*	*	Fibromyalgia
Pelvic and urinary pain/frequency[6]	*	*	*	*	Interstitial cystitis, chronic pelvic pain syndrome, sexual pain disorder
Sexual function questionnaire[7]	*	*	*	*	Female: sexual interest/arousal disorder, orgasmic disorder, genitopelvic pain/penetration disorder Male: erectile disorder, hypoactive disorder, premature ejaculation, delayed ejaculation
Headache checklist	*	*	*	*	Migraine, tension- type, chronic tension- type headaches
Psychological variables					
Diagnostic criteria for psychosomatic research[8]	*	*	*	*	Disease phobia, thanatophobia, health anxiety, illness denial, persistent somatization, functional somatic symptoms secondary to a psychiatric disorder, conversion symptoms, anniversary reaction, irritable mood, type a behavior, demoralization and alexithymia.
Hospital anxiety and depression scale[9,10]	*	*	*	*	Anxiety, depression
Body shape questionnaire[11]	*				Body image disorder
Eating attitudes test[12,13]	*				Dieting, bulimia and food preoccupation, oral control.
Revised adult attachment scale[14]	*				Adult attachment styles
Neo personality inventory subscales [15,16]	*				Neuroticism, openness to experience

Post-traumatic stress diagnostic scale[17]	*				Trauma, post-traumatic stress disorder
Stressful life event questionnaire[18,19]	*	*	*	*	Homelife, financial problems, social relations, personal conflicts, work conflicts, educational concerns, job security, loss and separation, sexual life, daily life, health concerns
Modified COPE scale[20,21]	*				Positive reinterpretation and growth, problem engagement, acceptance, seeking support, avoidance
Warwick-Edinburgh mental wellbeing scale[22]		*	*	*	Wellbeing
Short-form McGill pain questionnaire[23]		*	*	*	Pain
Sense of coherence questionnaire[24,25]		*			Sense of coherence
Multidimensional scale of perceived social support[26,27]		*			Social support
Lifestyle checklist					
Food frequency questionnaire[28]	*			*	Food frequency
Meal pattern checklist[29]	*				Meal pattern
Quality of life short form-12[30]	*			*	Quality of life
International physical activity questionnaire[31]	*			*	Work time, leisure time, transportation
Pittsburg sleep quality index[32]	*			*	Subjective sleep quality, sleep latency, sleep duration, sleep disturbances, use of sleeping medication
Smoking, addiction and drinking checklist	*	*	*	*	Waterpipe and cigarettes smoking, drug abuse, alcohol drinking
Demographic and socio-economic checklist	*	*	*	*	Health costs, socio-economic status, demographic data
Clinical measurements					
Blood pressure measurement	*	*	*	*	Systolic and diastolic blood pressure (sphygmomanometer)
Anthropometric measurements	*	*	*	*	Weight and height measurement - neck, chest, waist and hip circumferences, skinfold thickness
Pain threshold test	*				Hypersensitivity to pain (Algometer - Somedic Type II, probe of 1.0 cm ² ; Somedic Production AB, Hörby, Sweden)
Pulmonary function testing	*				Lung volumes (Spirometer - MIR spirolab; MIR Co., Roma, Italy)
Bioelectrical impedance analysis	*	*	*	*	Body composition

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