



This management supporting tool is intended principally for primary care physicians, pharmacists and nurses. It has indicative purposes and does not replace the judgment of the clinician. This document was developed based on a systematic review of clinical practice guidelines and the experience of Québec stakeholders who contributed to its development. For more information, visit the Publications section of inesss.qc.ca website.

GENERAL INFORMATION

- Myalgic encephalomyelitis / chronic fatigue syndrome (ME / CFS):
 - is a chronic and complex condition for which there is **no diagnostic test** and **no known cure**.
 - is a **physical disease** whose cause remains uncertain.
 - can affect anyone regardless of age, gender, ethnicity or social status. Women are more affected as well as adults between the ages of 30 and 60.
- **The clinical presentation** is variable and functional independence may be affected to different degrees - e.g., the person could:
 - be able to perform activities of daily living (ADLs - e.g., feeding, dressing, hygiene) and instrumental activities of daily living (IADLs - e.g., cleaning, meal preparation, shopping), but require accommodations to study or work;
 - requiring assistance with ADLs and IADLs and being unable to study or work;
 - depend on others for ADLs and unable to perform IADLs, study or work.
- Periods of remission may occur for varying lengths of time, but complete remissions would rarely be observed.

- ❗ **ME / CFS may be suspected** in a person presenting an atypical constellation of multisystem clinical manifestations lasting ≥ 6 weeks.
- ❗ **Management of the individual should be initiated as soon as ME / CFS is suspected**, even if the diagnosis is not confirmed, to promote stabilization of the condition and help prevent deterioration.
- ❗ **Children with suspected ME / CFS** should be referred to a pediatrician.

→ **ME / CFS is the health status of a person who meets the following conditions:**

1. Presence of the 4 following clinical manifestations:
 - Asthenia¹;
 - Post-exertional malaise²;
 - Cognitive difficulties;
 - Non-restorative sleep or sleep disturbances.
2. Existence of clinical manifestations for ≥ 24 weeks on a continuous basis or not.
3. No other condition can explain the entire clinical picture.

1. **Asthenia** is an intense fatigue that results in a significant reduction in the ability to perform ADLs and IADLs.
2. **Post-exertional malaise** refers to the appearance or aggravation of a group of clinical manifestations that occur following even minimal effort, whether physical, cognitive or emotional.

SUMMARY



- General information 1
- Assessment of health condition
 - Clinical manifestations . . . 2
 - Health history 4
 - Differential diagnoses and comorbidities 5
 - Examination 6
 - Analysis and investigations 7
- Management
 - Therapeutic approach . . . 8
 - Energy management, food intake, support 9
- Follow-up
 - Follow-up items, activity log 10
- Consultation considerations
 - Before the consultations, day of consultations, frequency of consultations 11
- Main references 11
- Appendices
 - Autonomic-like clinical manifestations 12
 - Questions to help identification 14
 - Non pharmacological approaches 15

ASSESSMENT OF HEALTH CONDITION

CLINICAL MANIFESTATIONS

- A review of systems should be performed.
- The following elements should be documented:
 - clinical manifestations – type, onset, intensity, duration, fluctuation, frequency;
 - treatments or activities that relieve or exacerbate manifestations;
 - the effects of previous or current trials of therapeutic intervention, including tolerance and sensitivity to medication;
 - impact on level of independence and performance in completing ADLs, IADLs, school and work - e.g., postponing or avoiding activities, taking more frequent time off;
 - the consequences on quality of life and psychological, emotional and social well-being.
- For any given individual, the clinical manifestations are numerous and may affect different systems. Physical, neuro-psychological and psychological manifestations may be present.

CLINICAL MANIFESTATIONS OR COMPLAINTS REPORTED BY THE PERSON	
Category	Examples ¹ – <i>Non exhaustive list</i>
Allergies, intolerances and sensitivities	<ul style="list-style-type: none"> • Intolerance to environmental factors or chemicals • New allergies or intolerances to one or more foods
Cardiorespiratory	<ul style="list-style-type: none"> • Discomfort when sitting or standing • Dyspnea • Dizziness or feelings of vertigo • Palpitations • Syncope or pre-syncope • Tachycardia
Cognitive difficulties	<ul style="list-style-type: none"> • Difficulties in <ul style="list-style-type: none"> - decision-making - organizing thoughts or ideas - performing complex tasks • Impression of mental fog • Lack of attention or concentration • Loss of train of thought • More frequent forgetfulness
Diverse	<ul style="list-style-type: none"> • Fever or chills • Frequent urination • Involuntary weight change • Reduced tolerance to stress
Fatigue	<ul style="list-style-type: none"> • Feeling heavy, being pulled down by gravity or having difficulty moving • Feeling that it takes more effort than before to think or do an activity • Lack of energy, making it difficult to do anything at all
Gastrointestinal	<ul style="list-style-type: none"> • Abdominal pain • Abnormal appetite or early satiety • Nausea • Symptoms of irritable bowel
Musculoskeletal	<ul style="list-style-type: none"> • Arthralgia without redness or swelling • Myalgia
Neurological	<ul style="list-style-type: none"> • Difficulty in vision accommodation • Headaches or cervicgia • Hyperesthesia, dysesthesia or allodynia • Increased sensitivity to stimuli: light, sound, touch, temperature changes • Sensory overload
Otorhino-laryngological	<ul style="list-style-type: none"> • Dry eyes or mouth • Hypersalivation • Nasal congestion • Recurrent sore throat • Swollen or tender cervical or axillary nodes
Post-exertion malaise	<ul style="list-style-type: none"> • Feeling like one is about to collapse some time after even a mild activity • Feeling worse or having more symptoms some time after an activity that was not previously a problem
Sleep alterations	<ul style="list-style-type: none"> • Difficulty falling or staying asleep • Feeling of hyperexcitability with fatigue, but unable to fall asleep • Not feeling rested and fit in the morning or even more tired than when the person went to bed • Vivid dreams or nightmares
Thermoregulation	<ul style="list-style-type: none"> • Abundant sweating • Cold extremities • Diaphoresis during day or night • Very sensitive to cold

1. Some clinical manifestations may belong to more than one category, but they are presented in only one category.

Clinical manifestations intensity and fluctuation

- The intensity of the manifestations may change during the day, from day to day and over the course of the illness.
 - People with ME / CFS usually wait until they are well enough to seek primary care. Their symptoms may therefore be more severe than they appear.
- The manifestations can be present continuously or episodically.
- The onset or worsening of manifestations is not always predictable. It may be due to a change in position (e.g., from lying to sitting or standing, from sitting to standing), an episode of post-exertional malaise, a stress (physical, cognitive or emotional) or the perimenstrual period.

Review of systems

- The presence of several clinical manifestations associated with functions that are not voluntarily controlled may suggest an imbalance in autonomic nervous system function (e.g., heart rate, breathing, digestion, sweating).
- The presence of autonomic-like clinical manifestations may increase the level of suspicion for ME / CFS.

Refer to [Appendix 1](#) for more information about these manifestations.

ADDITIONAL INFORMATION ABOUT SOME CLINICAL MANIFESTATIONS

Manifestations	Precisions
Clinical manifestations associated with changes in position	<ul style="list-style-type: none"> • They may suggest orthostatic intolerance. • They may go unnoticed if the person adopts positions that allow him or her to combat their occurrence without realizing it. <p>Refer to Appendix 1 for more information about orthostatic intolerance.</p>
Fatigue	<ul style="list-style-type: none"> • The clinical picture of asthenia is different from that of physiological fatigue: <ul style="list-style-type: none"> - intensity of fatigue disproportionate to the effort that caused it; - low energy reserve upon waking and decrease in available energy despite little activity; - need for rest or a nap to get through the day. • Deconditioning is not the cause of the fatigue seen in ME / CFS; however, it may eventually set in for individuals who have significant difficulty performing their ADLs.
Pain	<ul style="list-style-type: none"> • It can be localized, multifocal or migratory.
Post-exertion malaise	<ul style="list-style-type: none"> • It can be difficult to identify. • The repetition of post-exertional malaises with incomplete recovery may complicate the evaluation of the clinical picture. <p>Refer to the <i>Support people with ME / CFS Aide-mémoire</i> for a complete overview of post-exertional malaises.</p>

Refer to [Appendix 2](#) for questions that can help identify asthenia, post-exertional malaise and clinical manifestations associated with changes in position.



HEALTH HISTORY

→ The following should be documented:

- **medical history:** the manifestations may have started insidiously or may have appeared following a triggering event (e.g., chronic or acute infection and important physical or emotional trauma);
- **family history:** a familial pattern of ME / CFS is reported;
- **pharmacological history:** people with ME / CFS are more sensitive than average to drugs, their inactive ingredients and drug interactions (e.g., drugs that affect the central nervous system);
- **use of natural products:** people with ME / CFS tend to use natural products and are more sensitive than average to their ingredients;
- **lifestyle and sleep patterns;**
- **personal situation:** the clinical manifestations of ME / CFS can have an impact on various aspects (e.g., difficulty with family management, isolation, financial concerns).

DIFFERENTIAL DIAGNOSIS AND COMORBIDITIES

- The process of differential diagnosis and diagnosis of comorbidities should be done according to standard practice.
- The process of differential diagnosis can be very time consuming as many conditions have symptoms similar to ME / CFS.
- The presence of post-exertional malaise may help distinguish ME / CFS from other clinical conditions. Their initial absence, however, should not lead too quickly to the elimination of the diagnosis of ME / CFS, as they may be difficult to detect.

EXAMPLES OF DIFFERENTIAL DIAGNOSIS OR OF COMORBIDITIES <i>Non exhaustive list</i>	
<p>⚠ A condition that explains all of the clinical manifestations should exclude the diagnosis of ME / CFS, whereas a condition that explains only part of them should be treated as a comorbidity.</p> <p>⚠ Consider only in the presence of a suggestive clinical picture.</p>	
Disorders	Conditions ¹
Cardiovascular	<ul style="list-style-type: none"> • Cardiomyopathy • Postural orthostatic tachycardia syndrome²
Diverse	<ul style="list-style-type: none"> • Cancers • Mast cell activation syndrome² • Multiple chemical sensitivity syndrome² • Substance abuse
Endocrine or metabolic	<ul style="list-style-type: none"> • Addison's disease • Cushing syndrome • Diabetes • Hyperthyroidism or hypothyroidism
Gastrointestinal	<ul style="list-style-type: none"> • Allergies/food intolerances² • Celiac disease • Eosinophilic esophagitis • Inflammatory bowel disease²
Genitourinary	<ul style="list-style-type: none"> • Endometriosis • Interstitial cystitis • Pelvic congestion syndrome
Hematological	<ul style="list-style-type: none"> • Anemia • Iron overload • Vitamin B12 deficiency
Infectious	<ul style="list-style-type: none"> • Hepatitis B or C • Human immunodeficiency virus • Lyme disease • Tuberculosis
Neurological	<ul style="list-style-type: none"> • Chiari malformation • Migraines • Multiple sclerosis • Myasthenia gravis • Parkinson's disease • Traumatic brain injury
Psychiatric	<ul style="list-style-type: none"> • Anxiety disorders² • Bipolar disorder • Depressive disorders²
Respiratory	<ul style="list-style-type: none"> • Obstructive pulmonary disease • Sarcoidosis
Rheumatologic	<ul style="list-style-type: none"> • Ehlers-Danlos syndrome² • Fibromyalgia² • Myofascial pain syndrome • Polymyalgia rheumatica • Polymyositis • Rheumatoid arthritis • Sjögren's syndrome • Systemic lupus erythematosus • Vasculitis
Sleep	<ul style="list-style-type: none"> • Chronic insomnia • Idiopathic hypersomnia • Narcolepsy with or without cataplexy • Obstructive or central sleep apnea² • Periodic limb movement disorder • Restless leg syndrome

1. Some conditions may belong to more than one category, but they are presented in only one category.
2. These conditions are comorbidities commonly seen in the context of ME / CFS, so their presence does not invalidate the diagnosis.

EXAMINATION

→ The examination - physical and mental - should be guided by standard practice.



Good to know

- Observation and measurement of blood pressure and heart rate in the supine position and then in the standing position can help to identify the presence of clinical manifestations of an autonomic nature.
- Each of the positions should be held for 10-15 minutes to maximize the chances of observing the onset or worsening of clinical manifestations associated with a change in position. To achieve this, the person may be asked to lie on his or her back at the beginning of the consultation or during the questionnaire and to stand up after a certain time. When the person is standing up:
 - the questionnaire can be continued if not completed;
 - blood pressure and heart rate should be taken;
 - the appearance of certain signs of orthostatic intolerance should be looked for - e.g., skin mottling or pallor, lipothymia, etc.
- ⚠ ***The person should always be supervised while standing. Have a chair or stretcher nearby in case of discomfort.***

Refer to [Appendix 1](#) for more information on clinical manifestations of autonomic-like and orthostatic intolerance.

- Smartwatches can help assess a person's activity level and heart rate. However, their use is not scientifically validated.
- Examination results are often normal in people with ME / CFS.
- The following observations during consultation are consistent with ME / CFS:
 - increased cognitive or physical difficulties;
 - difficulty following the flow of discussion;
 - slowness of movement and motion;
 - discomfort while sitting with the need to lie down;
 - slumped posture.

ANALYSIS AND INVESTIGATIONS

→ The choice, sequence and prioritization of analyses and investigations should be made according to standard practice while taking into account the energy envelope.

⚠ **No analysis or investigation is specific to ME / CFS and no standard assessment for this condition is identified.**

ANALYSES AND INVESTIGATIONS TO BE CONSIDERED <i>Non exhaustive list</i>	
⚠ <i>Choose according to the clinical picture. Avoid over-investigation.</i>	
Category	Precisions
Basic analysis	<ul style="list-style-type: none"> Celiac disease screening Complete blood count C-reactive protein Creatine kinase Electrolytes – Na, K, Ca, phosphate Fasting glycemia Ferritin and iron status Hepatic function Renal function Thyroid function Urine tests
Specific analysis	<ul style="list-style-type: none"> Any analysis that allows: <ul style="list-style-type: none"> to establish the cause of clinical manifestations or to exclude possible diagnoses– see examples in section Differential diagnosis and comorbidities; to better characterize health status.
Investigations	<ul style="list-style-type: none"> Imaging and other investigations may be appropriate in some cases, but should not be routinely offered.

Good to know

- **The energy envelope** is the amount of energy available to carry out activities. Its size is specific to each person. However, it can vary from one day to the next and be modulated by various factors, including health status.
- People with ME / CFS generally have a smaller than average energy envelope and must manage their energy accordingly.

Refer to the Support people with ME / CFS [Aide-mémoire](#) for more information on the energy envelope and energy management.

→ Some investigations are more difficult, or even deleterious, for people with ME / CFS because of the physical or cognitive effort required (e.g., neuropsychological testing, cardiopulmonary exercise testing).

- Investigations should be tailored as much as possible to meet the energy envelope (e.g., allow for breaks, spread the assessment over several days).
- The use of cardiopulmonary exercise testing to assess the occurrence of post-exertional malaise is not advisable as it may result in considerable adverse effects. Identification of post-exertional malaise by characterization of clinical manifestations is preferred.

Refer to the Support people with ME / CFS [Aide-mémoire](#) for more information on post-exertional malaise.

→ Test and investigations results are often normal or mildly abnormal in people with ME / CFS. Other diagnoses should be suspected if there are marked abnormalities.

THERAPEUTIC APPROACH

→ Management should focus on:

- education on [energy management](#);
- optimizing treatment of comorbidities;
- a non-pharmacological approach to treat the clinical manifestations of ME / CFS.

❗ **Initiate management during the process of differential diagnosis and comorbidities, rather than waiting for confirmation of diagnosis.**

→ Pharmacological treatment of clinical manifestations of ME / CFS should be considered if treatment of comorbidities and adequate application of non-pharmacological strategies are insufficient to reduce them.

→ All non-pharmacological approaches and interventions as well as treatments should be based on usual practice while respecting the [energy envelope](#) and taking into account the [increased sensitivity of individuals to medications](#).

Refer to [Appendix 3](#) for more details on non-pharmacological strategies for autonomic-like clinical manifestations .

<p>✔ The therapeutic approach should be flexible and individualized.</p> <p>If a pharmacological treatment is initiated:</p> <ul style="list-style-type: none"> • efficacy and safety should be monitored at each visit, as clinical manifestations change over time; • it could have an impact on the onset of post-exertional malaise and on the warning symptoms. 	<p>❌ The person should not be encouraged to exceed personal limits or engage in activities to increase strength or endurance.</p> <p>❌ Activity programs, physical or cognitive exercise programs, or interventions with fixed or continuously increasing duration and intensity parameters should not be implemented.</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Refer to the *Support people with ME / CFS Aide-mémoire* for more information on post-exertional malaise and warning symptoms.

→ Referral to a health care professional should be considered according to standard practice.

- In particular, rehabilitation professionals can support the individual in managing energy to limit post-exertional malaise and implementing compensatory strategies to address cognitive difficulties.
- A medical specialist should be consulted before considering pharmacological treatment for autonomic-like clinical manifestations.

❗ **If pharmacological treatments are initiated**, it is important:

- that they be started in small doses and that these be titrated slowly to the minimum effective dose;
- to favour drugs that target more than one clinical manifestation to minimize adverse effects and polypharmacy.

→ **Comorbidities** contribute considerably to the severity of the clinical manifestations of ME / CFS, hence the importance of stabilizing them.

→ **The clinical manifestations of ME / CFS are interrelated.** Therefore, treatment of one clinical manifestation may have an impact on the others.

- Interventions on sleep, autonomic-like clinical manifestations, and pain would be particularly beneficial in facilitating ADL and IADL performance, reducing cognitive manifestations and asthenia, and improving well-being.
- The improvement of cognitive abilities depends on the improvement of other clinical manifestations. It therefore generally occurs later.

ENERGY MANAGEMENT - PACING

→ The individual should be made aware of the importance of energy management and informed of strategies that can be put in place.

Refer to the Support people with ME / CFS [Aide-mémoire](#) for more information on energy management.

→ Referral to a rehabilitation professional should be considered:

- to support energy management;
- to explore the possibility of continuing or resuming certain activities within the [energy envelope](#);
- if difficulties caused by reduced physical activity or mobility are present or if the person is at high risk of developing them.



Good to know

- Energy management is a **central element in the management of ME / CFS**. It allows to:
 - respect the [energy envelope](#);
 - limit the occurrence of post-exertional malaise and asthenia;
 - stabilize health status and help prevent its deterioration;
 - promote an improved quality of life.

FOOD INTAKE

→ Vitamin and mineral deficiencies should be treated according to standard practice.

→ Referral to a qualified professional should be considered if the person:

- needs advice on food intake or a restrictive diet;
- has a significant weight change;
- is at risk for malnutrition;
- has an increased sensitivity to many foods;
- has chewing or swallowing problems.



SUPPORT

→ The clinician should offer support or refer the person to health or social service professionals who can provide support in the following areas:

- energy management;
- food intake;
- acceptance and adaptation to the life changes imposed by ME / CFS, including the ability to manage family life and outside support;
- education or work;
- financial, including access to assistance programs.

Refer to the Support people with ME / CFS [Aide-mémoire](#) for more information on the support that can be offered.

FOLLOW-UP COMPONENTS

Health status	Therapeutic approach	Support needs
<ul style="list-style-type: none"> • Evolution of clinical manifestations - onset, exacerbation, improvement, deterioration • If clinical manifestations appear, assessment of possible cause • Comorbidities evolution • Presence or development of complications related to immobility 	<ul style="list-style-type: none"> • Effectiveness of energy management strategies and revision as needed • Appropriate implementation of non-pharmacological approaches • Effectiveness and safety of pharmacological treatments and adjustment as needed 	<ul style="list-style-type: none"> • Energy management • Acceptance and adaptation to life changes imposed by the disease, including the ability to manage family life and outside support • Education or work • Financial aspect

→ **Condition and needs vary over time.**

→ **The effect of the strategies and interventions** implemented should be assessed by characterizing post-exertional malaise and not by the intensity of fatigue, since this may be one of the last symptoms to resolve.

- Persistence in approach is indicated if a trend toward improvement in post-exertional malaise is observed - e.g., clinical manifestations that are more spaced out, of less intensity, or of shorter duration.
- Stabilization of health status may be slow, and the effect of strategies implemented should be assessed over months or years rather than from one visit to the next.

Refer to the Support people with ME / CFS [Aide-mémoire](#) for more information on post-exertional malaise characterization.

→ Some people with more severe disease are at risk for complications related to immobility (e.g., pressure ulcers, deep vein thrombosis, contractures, and osteoporosis). Standard prevention and management practices are applicable, provided they are within the [energy envelope](#).

ACTIVITY LOG

→ The affected individual may be asked to document:

- his/her signs and symptoms (onset, deterioration, and resolution) to identify triggers, exacerbators, and mitigators;
- activities performed and energy level (e.g., type of activity, intensity, frequency and duration);
- ability to perform ADLs, IADLs, and school or work;
- the amount of time the person spends sitting or standing.



Good to know

- Keeping an activity log is helpful, but can be a significant effort and more difficult for people with a low threshold for post-exertional malaise. Therefore, the activity log could be kept for short periods or intermittently.

CONSULTATION CONSIDERATIONS

BEFORE THE CONSULTATION

- Advance preparation may optimize the consultation given the complexity of the health status of individuals suspected or diagnosed with ME / CFS.
- The individual could be asked to identify priority areas for assessment.

⚠ It is helpful to schedule longer than usual consultations when ME / CFS is suspected given the complexity of the condition and the need to respect the person's capacity.

DAY OF CONSULTATION

- The conduct of consultations and the management of appointments should be adapted to facilitate the participation of people with ME / CFS.

Refer to the Support people with ME / CFS [Aide-mémoire](#) for information about adaptations to be considered.



Good to know

- Consultations and interpersonal interactions may require significant physical and cognitive effort on the part of the person with the disease and may lead to an exacerbation of clinical manifestations.

CONSULTATION FREQUENCY

- The frequency should be determined by:
 - the individual's ability to participate in the consultation;
 - the progress of the assessment process when the diagnosis is not yet established;
 - the severity and complexity of the clinical manifestations;
 - the effectiveness of the management of the clinical manifestations.
- Several consultations are necessary to complete the diagnostic process and to ensure regular follow-up.
- If possible, more frequent follow-ups should be offered during the assessment process or when therapeutic interventions are modified (e.g., 1-2 months). Thereafter, appointments could be more spaced out depending on the person's needs (maximum 12 months).

MAIN REFERENCES

To consult all the references: see the [report in support](#) of the clinical tools.

APPENDIX 1

AUTONOMIC-LIKE CLINICAL MANIFESTATIONS

→ These manifestations affect functions that are controlled by the autonomic nervous system (e.g., heart rate, breathing, digestion, sweating).

Category	Examples of autonomic-like clinical manifestations	
Cardiovascular	<ul style="list-style-type: none"> • Chest pain or discomfort • Exercise intolerance • Orthostatic hypotension • Orthostatic intolerance 	<ul style="list-style-type: none"> • Palpitations • Syncope and presyncope • Tachycardia (postural or not)
Constitutional	<ul style="list-style-type: none"> • Extreme pallor • Flushing • Fatigue 	<ul style="list-style-type: none"> • Loss of appetite • Myalgia • Sleep alterations
Gastrointestinal	<ul style="list-style-type: none"> • Abdominal distension • Abdominal pain or discomfort • Constipation • Diarrhea • Dysphagia • Early satiety 	<ul style="list-style-type: none"> • Gastroesophageal reflux • Nausea • Slow digestion • Slowing down of gastroesophageal transit
Genitourinary	<ul style="list-style-type: none"> • Bladder leakage • Erectile dysfunction • Frequent and urgent urination • Incomplete bladder emptying 	<ul style="list-style-type: none"> • Nocturia • Non menstrual pelvic pain • Urinary retention • Vaginal dryness
Neurological	<ul style="list-style-type: none"> • Cognitive difficulties • Dizziness • Generalized weakness • Headache • Increased sensitivity to sensory stimuli: light, sound, touch, temperature changes, taste and smell 	<ul style="list-style-type: none"> • Neuropathic pain • Paresthesia • Vertigo
Ocular	<ul style="list-style-type: none"> • Accommodation difficulties • Blurred vision 	<ul style="list-style-type: none"> • Mydriasis • Scotoma
Respiratory	<ul style="list-style-type: none"> • Dysfunctional breathing 	<ul style="list-style-type: none"> • Hyperventilation
Secretory	<ul style="list-style-type: none"> • Dryness of the nasal mucosa and oropharynx • Sialorrhea 	<ul style="list-style-type: none"> • Xerophthalmia • Xerostomia
Thermoregulatory	<ul style="list-style-type: none"> • Absent sweating • Abundant sweating • Cold extremities 	<ul style="list-style-type: none"> • Diaphoresis during day or night • Heat and cold intolerance • Very sensitive to cold

GENERAL INFORMATION

ASSESSMENT OF HEALTH CONDITION

MANAGEMENT

FOLLOW-UP

CONSULTATIONS

APPENDICES

→ In the context of ME/CFS, the following terms are often used in relation to autonomic-like clinical manifestations: dysautonomia, orthostatic intolerance, postural orthostatic tachycardia syndrome.

- **Dysautonomia**

Imbalance between the functions of the autonomic nervous system, that is, between the sympathetic and parasympathetic systems. This term includes autonomic clinical manifestations and common autonomic disorders such as postural orthostatic tachycardia syndrome and orthostatic hypotension.

- **Orthostatic intolerance**

A term used to describe a constellation of clinical manifestations that occur during the transition from lying or sitting to standing and that improve with decubitus.

EXAMPLES OF ORTHOSTATIC INTOLERANCE CLINICAL MANIFESTATIONS

Non exhaustive list

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Acrocyanosis • Blurred vision or scotoma • Chest pain • Dizziness or vertigo • Feeling of weakness or lipothymia • Headache • Loss of clarity of thought and other cognitive difficulties • Skin mottling | <ul style="list-style-type: none"> • Nausea • Palpitations • Sensation of internal tremors, usually not noticeable from the outside and often affecting the lower limbs • Skin mottling • Skin pallor • Syncope and presyncope |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- **Postural orthostatic tachycardia syndrome**

A condition marked by a sustained increase in heart rate when moving from the supine to the standing position, combined with clinical manifestations of orthostatic intolerance. The diagnosis of this condition is complex and is the responsibility of specialist physicians.

APPENDIX 2

QUESTIONS TO HELP IDENTIFY CERTAIN CLINICAL MANIFESTATIONS

QUESTIONS EXAMPLES	
Asthenia	
<ul style="list-style-type: none"> • What is the intensity of your fatigue on a scale of 0 to 10 (0 = no energy and 10 = maximum energy)? • Have you ever felt this tired? • What helps you most to recover and feel less tired? • What activities are you able to do without triggering fatigue? • How many activities are you able to do? How does this compare with before? • What makes your fatigue worse? 	<ul style="list-style-type: none"> • Does fatigue prevent you from doing activities that you need or want to do? • How has your new condition affected your ability to work or go to school, care for yourself or your loved ones, and perform tasks? • What happens if you continue to do an activity despite being tired? • How many times a day do you sit or stand? • Do you have to take naps to get through your day?
Post-exertional malaise	
<ul style="list-style-type: none"> • What happens when you do or try to do a physical or cognitive activity? What happens afterwards? • What happens if you try to exceed your limits? • Do you avoid or modify any activities because of what might happen if you do them? If so, which ones? 	<ul style="list-style-type: none"> • What activities are you able to do without triggering symptoms? How many activities can you do in a day? • How long does it take from the time you do an activity to the time you start to feel unwell? • How long do you take to recover from an activity?
Clinical manifestations suggestive of orthostatic intolerance	
<ul style="list-style-type: none"> • Do you have symptoms that occur when you sit or stand? • Do you fall more frequently than before? • What happens if you stand up quickly after sitting for a long time? • How long can you stand before you feel unwell? For example, can you wash dishes, wait in line, do grocery or go shopping for more than a few minutes? 	<ul style="list-style-type: none"> • Are you able to take a hot shower or hot bath without feeling tired or dizzy? • Do you have symptoms when you stand or sit upright? • Do your symptoms improve when you lie down? • Do you study or work while lying down or semi-seated? Why? • Do you usually hold your knees close to your chest when sitting, cross your legs when standing, or move around when waiting in line?

GENERAL INFORMATION

ASSESSMENT OF HEALTH CONDITION

MANAGEMENT

FOLLOW-UP

CONSULTATIONS


APPENDICES

APPENDIX 3

NON PHARMACOLOGICAL APPROACH FOR AUTONOMIC CLINICAL MANIFESTATIONS

→ The presence of numerous clinical manifestations that appear nonspecific, coupled with clinical manifestations suggestive of orthostatic intolerance, is sufficient to warrant the early use of a nonpharmacologic approach to clinical autonomic manifestations, whether the diagnosis is suspected or confirmed.

Refer to [Appendix 1](#) for a description of orthostatic intolerance.

Category	Advice and strategies
Clothing	<ul style="list-style-type: none"> Wear 20-30 mm Hg compression garments (e.g., abdominal girdle or waist-high compression tights). Wear cooling clothing.
Food intake	<ul style="list-style-type: none"> Increase fluid and salt intake in people who do not have high blood pressure, kidney or heart failure or other contraindications. <ul style="list-style-type: none"> Drink frequently > 2 liters/day - drink more in the morning after a night without drinking (e.g., every hour) and less during the rest of the day (e.g., every 2 hours), drink during and after activity. Aim to drink the equivalent of a small glass each time. Add salt to the meal to taste. Split meals (e.g., 3 meals and 2 to 3 snacks). Lie down for at least 15 minutes after a meal or alcohol consumption for those who have no contraindications (e.g., gastroesophageal reflux disease). <p> Good to know</p> <ul style="list-style-type: none"> The optimal amount of salt varies from person to person; salt tablets with potassium may be helpful for some people. Examples of foods and beverages to increase fluid and salt intake: healthy rehydration drink, tomato or vegetable juice, soups, pickles, olives, salsa, salted nuts. Alcohol consumption would generally worsen the clinical manifestations. Immobility and increased NaCl intake may increase the risk of osteoporosis. In such cases, standard practice should be implemented, while respecting the energy envelope.
Lifestyle habits	<ul style="list-style-type: none"> If possible, engage in light physical activity on a daily basis within the energy envelope (e.g., movements lying down, sitting, in the water, or lower extremity toning). Avoid stress. Engage in activities that stimulate the vagus nerve or activate the parasympathetic nervous system on a daily basis within the energy envelope (e.g., cardiac coherence, deep and diaphragmatic breathing, box breathing, meditation, relaxation, cold water immersion, cold compresses, listening to relaxing music, spending time outdoors, singing). <p>Refer to Support people with ME / CFS Aide-mémoire for the integration of physical activities into the person's routine.</p>
Posture	<ul style="list-style-type: none"> Sleep on a reclining bed with the head up (reverse Trendelenburg position): increase the inclination very gently to the maximum tolerated (max. 15 degrees). Adopt postures that improve venous return to the heart (e.g., crossing legs, shifting weight from one leg to the other or heel-to-toe rocking when standing, sitting with knees higher than hips or with knees close to chest, contracting leg muscles before standing). Change positions frequently to avoid stationary positions. Avoid standing or sitting for long periods of time. Avoid sitting with your feet dangling. Avoid getting up too quickly. Pay attention to posture in general and neck posture in particular.
Temperature	<ul style="list-style-type: none"> Avoid hot environments for extended periods of time (e.g., saunas, sunbathing). Take showers or short duration baths in lukewarm water and finish with cooler water.