What's Your Diagnosis?

"Why Do I Feel So Tired?"

By Lynn M. Marshall, MD, FAAEM, FRSM; Alison C. Bested, MD, FRCPC; and Riina I. Bray, BASc, MSc, MD, CCFP

Marie, a 37-year-old single oncology nurse presents to your office with daily symptoms of severe nausea, fatigue, difficulty concentrating and remembering, and aching muscles. Over the last few months, she has felt worse on encountering fresh paint, auto exhaust fumes, tobacco smoke, and scented products, which smell much stronger to her than they used to.

She was previously very active socially and athletically, and worked full-time as a nurse until 15 months ago when she had a severe upper respiratory infection. The infection was followed two weeks later by nausea, light-headedness, diarrhea, frequency, and urgency. She lost 25 lb within two months. In addition, sleep onset and maintenance became disturbed, and she felt unrefreshed in the morning. She noted severe exacerbation of fatigue after minimal activity (*e.g.*, having a shower) and became unable to socialize. She never recovered and, subsequently, has had severe nausea, fatigue, and muscle pain which have greatly impacted all aspects of her life.

She was unable to return to work, and said her employer's disability insurer refused to pay benefits on the grounds she did not have a "bona fide" illness. She was forced to move back in with her parents last year when her savings were depleted. Her parents had just



Figure 1. Red crescents on the soft palate.

Marie's history

- No significant previous medical, surgical, or psychiatric history
- No known allergies
- No history of physical or psychological trauma
- · Family history is non-contributory

renovated their living room and family room using oil-based paint and had installed new wall units in both rooms. Within one hour of moving in, she developed a severe headache, red, sore, watery eyes, and exacerbation of all

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Systems review

Central nervous system

- Difficulty retrieving words
- · Difficulty concentrating
- Inability to do more than one task concurrently
- Unsteadiness on her feet

Eyes, ears, nose, and throat

- · Daily stuffy nose and postnasal drip
- Intermittant sore throat; swollen, tender glands in her neck

Gastrointestinal

- Nausea waxes and wanes; never disappears completely
- Diminished appetite
- Weight stabilized after an initial 25-pound loss.

Musculoskeletal

- Migratory joint pains, but no swelling or redness of the joints
- Waxing and waning muscle pain and tenderness all over her body; never painfree
- Pain intensity ranges from 3 to 7 on scale of 0 (no pain) to 10 (worst possible pain)

No complaints in other body systems

This case, along with the FAQs on page 32 and the feature article on page 65, are based on a presentation by **Dr. Lynn M. Marshall, Dr. Alison C. Bested**, and **Dr. Riina I Bray**, given at the Family Medicine Forum 2002, College of Family Physicians of Canada, Montreal Outpher

her usual symptoms. She left immediately to stay with a friend, and, within 20 minutes, her headache and eye irritation were gone and her other symptoms had improved somewhat. When she returned to her parents' home a few days later, she noticed a very strong paint odour, and, within a few minutes, again developed headache and eye irritation.

Exposures

Community

 Born and raised in the same city; not near any pollution point sources

Home and hobby

- Parents' home is 20 years old, but in good condition with forced air, natural gas heat, and carbon monoxide detectors
- · Wall units are backed by particleboard
- No one smokes at home and no one has a hobby that emits contaminants
- No visible mould, pets, or pestcides (indoor or outdoor)

Occupation

- Job consisted of carefully adminstering chemotherapeutic drugs
- No similarly affected colleagues

Personal exposures/stressors

- Stopped using perfumed personal products four months ago.
- Using only unscented laundry detergent and vinegar and baking soda to clean
- Lifelong non-smoker
- Previous doctor referred her for psychiatric assessment, but no diagnosis or treatment was suggested

Diet and drugs

- Tries to eat frequently and in small amounts
- Has insufficient energy to prepare food, but she helps her mother whenever she can
- No recreational drug use
- No alcohol since, over last six months, even one glass of wine has led to severe symptom relapse lasting two days
- Currently taking a daily multivitamin and mineral preparation
- Using acetaminophen, 325 mg, every four hours, as neded, for pain (six to eight tablets/24 hours)
- Most medications exacerbate her nausea

Physical/laboratory examinations

- · Normal vitals and body mass index
- No apparent distress
- Slight pallor
- Red crescent on soft palate bilaterally (Figure 1)
- · Two severely carious teeth
- Slightly tender, enlarged anterior cervical lymph nodes bilaterally
- · Cold feet with poor capillary refill
- 14 of 18 positive fibromyalgia tender points
- Lab screening: All normal except erythrocyte sedimentation rate (26)
- No antibodies indicating recent viral or mycoplasma infections
- Allergy skin prick tests: Negative
- Multiple alpha intrusions/sleep interruptions on sleep study with significantly diminshed Stage 4 deep sleep

Marie retreated to her room and felt better when she stayed there with the window open and the heating vent and door closed. She felt even better on the rare occasion when she was away from the house. However, she began to notice she had a much stronger sense of smell than others had, and she would feel more unwell whenever she encountered whiffs of auto exhaust, tobacco smoke, or perfume, whereas she had never noticed any problem with these substances previously. Not only would her usual symptoms worsen, but she would also feel spacey and groggy.

About three times per week, she has good days when she can walk for 30 minutes and her energy level is about 5 out of 10 (10 being her normal energy prior to becoming ill). The rest of the week, she can only lie on the couch and try to read or crochet, but often she cannot concentrate

and has insufficient energy to do even these minimal activities.

What's your diagnosis?

This patient meets the case criteria for chronic fatigue syndrome (CFS), fibromyalgia (FM), and multiple chemical sensitivty (MCS), as stated in the feature article on page 66 (Table 3). All other relevant differential diagnoses have been ruled out.

What were the predisposing factors?

A possible predisposing factor might be that Marie worked with immunocompromised cancer patients who could have higher incidence of infections or unusual infections. A concern would be toxicity from exposure to cytotoxic drugs on the job, but appropriate precautionary technique was apparently followed and no co-workers were affected.

Historically, it appeared like her CFS and FM were precipitated by a severe upper respiratory infection, followed by a flu-like illness. Her parents' house was a sick building due to renovations done at a cooler time of year when the windows were closed most of the time and the forced air heating was operational. Oil-based paints likely gave off toxic volatile organic compounds (solvent mixtures) for months, as did particleboard in the wall units (*i.e.*, formaldehyde).

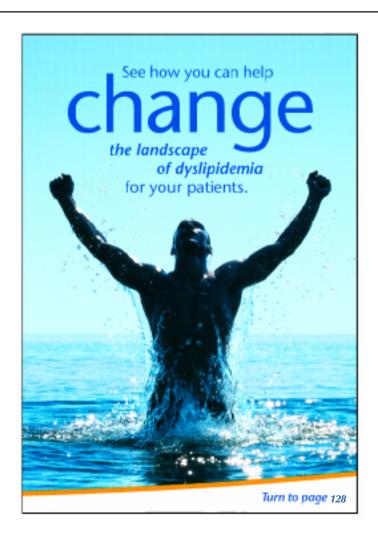
Perpetuating factors could include sleep

For an in-depth article on CFS, FM, and MCS, go to page 65.

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disturbance, potentially marginal nutritional intake, deconditioning, ongoing oral infection due to lack of repair of dental caries, ongoing exposures to everyday chemicals, and demoralization (grief over lost career and lifestyle, ongoing distressing symptoms).

Possible protective factors would include previous high education level and functioning, good support from family members and at least one friend, spiritual beliefs, and ongoing connection to a religious community.



How could you help this patient?

You can validate the patient's illness experience by carefully explaining your diagnoses to her and her parents. You can suggest that her union and a legal advocate help her appeal the denial of disability benefits. Prescribe adequate nutrition and treatment for pain and sleep disturbance. You can also provide information on how she can minimize exposure to her chemical triggers, as well as to known irritating, sensitizing, and toxic agents. It is important to encourage her to get her teeth

repaired and to gradually resume regular exercise. Schedule visits at a frequency suggested by the patient, or at least monthly at first. You may also build on the patient's prior skills and abilities to help her cope with her health problems. Remember to encourage continued use of her family, social, and religious support systems. And finally, allow her to grieve for lost lifestyle and occupation, and then encourage development of a new sense of purpose. De

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