



Recommendations for CFS or FM patient facing surgery?

by Dr. Charles Lapp, MD
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Q: I will be having surgery to remove some fibroids soon, and neither my doctor nor the surgeon seem to know anything about ME/CFS or FM. I remember reading that there are things doctors can do to reduce possible complications and recovery time. Could you point me to something I can share with my doctors?

A: The following information was developed to reduce the risk of surgical procedures for ME/CFS/FM patients. It is evidence-based, with sources, and is meant to be shared with the patient's professional healthcare team.

Recommendations for persons with ME/CFS (or Fibromyalgia) who are anticipating surgery

Basically CFS is a disorder characterized by severe debilitating fatigue, recurrent flu-like symptoms, muscle pain, and neurocognitive dysfunction such as difficulties with memory, concentration, comprehension, recall, calculation and expression. A sleep disorder is not uncommon.

- All of these symptoms are aggravated by even minimal physical exertion or emotional stress, and relapses may occur spontaneously.
- Although mild immunological abnormalities (T-cell activation, low natural killer cell function, dysglobulinemias, and autoantibodies) are common in CFS, subjects are not immunocompromised and are no more susceptible to opportunistic infections than the general population.
- [Recent research indicates antibodies to the XMRV retrovirus may be present in the blood of some CFS patients,* and] it is not recommended that the blood or harvested tissues of patients be used in others.
- Intracellular magnesium and potassium depletion has been reported in CFS. For this reason, serum magnesium and potassium levels should be checked pre-operatively and these minerals replenished if borderline or low. Intracellular magnesium or potassium depletion could potentially lead to cardiac arrhythmias under anesthesia.
- Up to 97% of persons with CFS demonstrate vasovagal syncope (neurally mediated hypotension) on tilt table testing, and a majority of these can be shown to have low plasma volumes, low RBC mass, and venous pooling. Syncope may be precipitated by catecholamines (epinephrine), sympathomimetics (isoproterenol), and vasodilators (nitric oxide, nitroglycerin, a-blockers, and hypotensive agents). Care should be taken to hydrate patients prior to surgery and to avoid drugs that stimulate neurogenic syncope or lower blood pressure.
- Allergic reactions are seen more commonly in persons with CFS than the general population. For this reason, histamine-releasing anesthetic agents (such as pentothal) and muscle relaxants (curare, Tracrium, and Mevacurium) are best avoided if possible. Propofol, midazolam, and fentanyl are generally well-tolerated.
- Most CFS patients are also extremely sensitive to sedative medications - including benzodiazepines, antihistamines, and psychotropics - which should be used sparingly and in small doses until the patient's response can be assessed.
- Herbs and complementary and alternative therapies are frequently used by persons with CFS and FM. Patients should inform the anesthesiologist of any and all such therapies, and they are advised to withhold such treatments for at least a week prior to surgery, if possible. Of most concern are:

Garlic, ginkgo, and ginseng (which increase bleeding by inhibiting platelet aggregation);

Ephedra or ma huang (may cause hemodynamic instability, hypertension, tachycardia, or arrhythmia),

Kava and valerian (increase sedation),

St. John's Wort (multiple pharmacological interactions due to induction of Cytochrome P450 enzymes),

Echinacea (allergic reactions and possible immunosuppression with long term use).

- The American Society of Anesthesiologists recommends that all herbal medications be discontinued 2 to 3 weeks before an elective procedure. Stopping kava may trigger withdrawal, so this herbal (also known as awa, kawa, and intoxicating pepper) should be tapered over 2 to 3 days.
- Finally, HPGA Axis Suppression is almost universally present in persons with CFS, but rarely suppresses cortisol production enough to be problematic. Seriously ill patients might be screened, however, with a 24-hour urine free cortisol level (spot or random specimens are usually normal) or Cortrosyn stimulation test, and provided cortisol supplementation if warranted. Those patients who are being supplemented with cortisol should have their doses doubled or tripled before and after surgery.

Summary Recommendations

1. Ensure that serum magnesium and potassium levels are adequate.
2. Hydrate the patient prior to surgery.
3. Use catecholamines, sympathomimetics, vasodilators, and hypotensive agents with caution.
4. Avoid histamine-releasing anesthetic and muscle-relaxing agents if possible.
5. Use sedating drugs sparingly.
6. Ask about herbs and supplements, and advise patients to taper off such therapies at least one week before surgery.
7. Consider cortisol supplementation in patients who are chronically on steroid medications or who are seriously ill.
8. Relapses are not uncommon following major operative procedures, and healing is said to be slow but there are no data to support this contention.

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I hope that you have found these comments useful, and that they will serve to reduce the risk of surgical procedures.

Yours truly,

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* See "[Detection of an Infectious Retrovirus, XMRV, in Blood Cells of Patients with Chronic Fatigue Syndrome](#)," *Science*, Oct 8, 2009.

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