

How to Treat Young Adults With Myasthenia Gravis

Q *How would you pharmacologically treat myasthenia gravis in a young adult as opposed to an older individual with similar severity? What needs to be taken into consideration?*

A Dr. Kaminski feels that the basic approach is similar in younger patients, while Dr. Argov feels there are some special issues that may be relevant to treating young adults. As always, the physician must be “balancing severity of disease with the considerable potential adverse effects of corticosteroids and other immunosuppressive/immunomodulatory agents,” Dr. Kaminski says. The major differentiating factor is a concern for the cumulative risk of neoplasia of immunosuppressive (azathioprine, cyclosporine and cellcept) in prescription of these agents to a young person expected to take them potentially for many years, he adds.

Young adults may be less receptive to steroid treatment because of the possible cosmetic side effects, Dr. Argov says. Though the side effects can happen at any age, vanity and appearance are likely to be more important to a young adult than an elderly patient. Also, the general attitude toward pharmacology in young adults may be a barrier neurologists have to overcome. “Young people do not always adhere to complicated therapy regimens and have strong feelings against being drug dependent at an early stage of life,” he says. “Even the ‘periodical’ therapies—IVIG, plasmapheresis—are hard to fit into the busy life of young people who do not like to be bound by schedules.”

Q *Would you consider adding an AD drug like Aricept to a regimen of Mestinon? How would you manage side effects like perspiration and diarrhea*

brought on by the cholinesterase inhibitor?

A Both members of our panel say they would not add Aricept to the regimen. “It is not equivalent in its action,” Dr. Kaminski says. Central active drugs have no place in the treatment, adds Dr. Argov. “The side effects mentioned are indeed bothersome, although I must say that I see it more in the elder population.” He also says that if side effects become very bad, he will add common anti diarrhea drugs with anticholinergic effects. “I do not remember having perspiration at such a degree that necessitated drug therapy.”

Q *If a female patient has clear child-bearing hopes and intentions, what is the risk due to use of CellCept and/or methotrexate, as compared to prednisone/thymectomy? How do you manage myasthenia during pregnancy?*

A Dr. Kaminski says there is no general way he manages MG during pregnancy, though “I do not use methotrexate for myasthenia gravis,” he says. “There is inadequate data regarding cellcept and its safety in pregnancy. Also, I do not believe the evidence base is good for thymectomy.”

The use of azathioprine, which Dr. Argov says he has had a very good experience with, and other cytotoxic agents during child birth may also warrant caution in some patients. “While there is no strong data about possible deleterious effects of those drugs on sperm function and on fetal development many young people are still worried,” he says. “The management of the pregnant woman with MG may become more complicated if such drugs are stopped.”

Although not related specifically to



childbirth, a recent study by Argov et al. found that EN101 antisense (Monarsen) use was shown to improve scores on the Quantitative MG scale in MG patients. The study was published in *Neurology* 2007;69:699-700 and followed 16 patients with stable MG and were receiving 180mg of pyridostigmine daily.

Patients were given escalating oral doses the first day, followed by a daily dose of 500µg/kg for three days. Thirteen of 15 patients (one violated protocol) saw an improvement in QMG score on the fourth day as compared to baseline—14.9 (+ 7.25 SD)—while the overall mean change from baseline was 6.13 (+ 4.5 SD), a mean improvement of 46.5 percent. However, few patients had clear clinical progress, such as ptosis disappearance. In regards to side effects, nine patients encountered transient sensation of dryness of mouth, and four reported dryness in their eyes. **PN**

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