

standard-care group, with no significant difference in the decline in CD4+ count from 24 weeks after cessation of ART, as compared with the decline from randomization in the standard-care group. We cannot agree, therefore, that the effect leveled out over time after the discontinuation of ART (Fig. 3A of the article). The 48-week course of ART also led to a reduction in viral load over a period of 24 weeks after the cessation of ART. This finding suggests that cessation of ART after intervention in early infection is distinct from interruption of ART in chronic HIV infection, in which there is no sustained reduction in viremia.

The SPARTAC trial was not designed to test differences between groups in terms of clinical end points; however, it is a large, primary-infection trial with substantial follow-up to date (median, 4.2 years [interquartile range, 3.7 to 4.7]).

We agree that the question of when to initiate ART in patients with chronic infection requires a large, randomized trial with clinical end points, as planned in the START study.¹

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Neurostimulation for Parkinson's Disease with Early Motor Complications

TO THE EDITOR: In their clinical trial, Schuepbach et al. (Feb. 14 issue)¹ found an overall gain of 8.0 points in quality of life in the neurostimulation group ($P=0.002$), as assessed by means of the Parkinson's Disease Questionnaire (PDQ-39) summary index. This may be a magnification of the benefits, because infection related to deep-brain stimulation causes a substantial reduction in quality of life. However, this variable is not included in the PDQ-39 summary index. According to different studies,^{2,3} rates of infection related to deep-brain stimulation vary from 3.8% to 12.6%.

From 1996 through 2012, at our institution, 130 patients underwent implantation of hardware for deep-brain stimulation. After a median follow-up of 48 months, 13 patients (10.0%) received a diagnosis of related infection, and 6 (4.6%) received a diagnosis of lead or generator externalization. Patients who received a diagnosis of infection underwent a median of two extra surgical procedures, with 6 undergoing total hardware removal and 4 undergoing partial hardware removal. We should take into account that infection related to deep-brain stimulation may impair quality of life and increase health care costs. Better surgical techniques and technological improvements will probably decrease the inci-

dence of complications related to deep-brain stimulation in the future.

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TO THE EDITOR: The investigators in the Controlled Trial of Deep Brain Stimulation in Early Patients with Parkinson's Disease (EARLYSTIM) found that "no significant between-group differences were observed for cognitive assessments" when they compared patients who received subthalamic neurostimulation for Parkinson's disease with those who received medical therapy alone. In a recent review,¹ Okun described a meta-

analysis finding that “the most common cognitive side effect of deep-brain stimulation was a decrement in verbal fluency.^[2] Impaired verbal fluency is characterized by communication difficulties and by problems in generating word lists.” Okun and colleagues also conducted a study that showed that a “decrease in verbal fluency is an effect of surgical electrode implantation, not an effect of stimulation.”³

Did the EARLYSTIM investigators use a technique of lead placement that avoided impairing verbal fluency, or were the tests they used for assessing cognitive outcomes not sensitive instruments for measuring verbal fluency?

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THE AUTHORS REPLY: We agree with Carmona-Torre and colleagues that infections of the electrodes are an important complication of neurostimulation. Most of the infections are skin infections,¹ but they can also extend into the brain in rare cases.² Of the 124 patients in the neurostimulation group in EARLYSTIM, 4 (3.2%) had skin infections, including 2 with intracerebral infection that needed surgical revision of the system. The improvement in quality of life for these 4 patients was in the range of the entire group, and they did not have long-term sequelae. We agree that such infections can cause serious long-term effects and need to be discussed with

the patient as an important risk. It is a challenge to reduce this infection rate with safer implantation techniques and better implants.

Keller raises questions regarding the effect of neurostimulation on verbal fluency shown in all controlled studies.³⁻⁵ We assume that verbal fluency is also significantly worse in patients in the neurostimulation group than in those in the control group in EARLYSTIM. Therefore, we have added a second protocol, EARLYSTIM-speech, to compare standardized speech recordings at baseline and at 24 months. This study will provide more information not only on the frequency and severity of changes of word fluency but also on the effect of these changes on communication in real life.

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Since publication of their article, the authors report no further potential conflict of interest.

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Esophageal Sphincter Device for Gastroesophageal Reflux Disease

TO THE EDITOR: In their study, Ganz and colleagues (Feb. 21 issue)¹ found that the effect of an esophageal device on the median percentage

of time in a 24-hour period in which the pH was less than 4 (fraction time) was 3.3%, which is disappointingly near the upper limit of the nor-