Reply

SIR—We appreciate Talbot’s and Frothingham’s interest in our report and their proposal regarding the mechanism by which Mycobacterium bovis BCG meningitis developed in our patient. Indeed, BCG was used for intravesical instillation during therapy for bladder carcinoma in the hospital where our patient received intrathecal chemotherapy. Intrathecal medications for our patient were prepared in the same biologic safety cabinet on the same day as the BCG on two separate occasions. Unfortunately, thus far we have not been able to differentiate the BCG strain used for intravesical instillation from the strain used for BCG vaccination in the Netherlands by restriction fragment length polymorphism analysis; the latter strain was isolated from our patient.

Studies to differentiate these strains are in progress, but the results are not expected to be available within the next six months. Our patient’s case was different from the cases cited by Talbot and Frothingham as our patient had a documented BCG vaccination 12 years before meningitis developed. Until BCG strains can be differentiated by genetic subtyping, we cannot rule out a reactivation that occurred 12 years after vaccination or accidental intrathecal administration of M. bovis BCG as a cause of our patient’s meningitis.

H. van Deutekom
Municipal Health Service, Tuberculosis Department, Amsterdam, the Netherlands

Immunodeficiency with Hyper-Immunoglobulin M in an Infant Who Had Cryptosporidiosis Associated with Interferon γ Deficiency

SIR—We read with interest the case report by Gomez Morales et al. [1] about severe, protracted cryptosporidiosis associated with IFN-γ deficiency in a male infant. Immunologic studies performed when the patient was 10 months of age showed a normal percentage of peripheral blood T and B lymphocytes, low-to-normal serum IgA and IgG levels, and raised serum IgM levels as well as a normal proliferative response to mitogen phytohemagglutinin. The authors showed that supernatants from cultures of the patient’s peripheral blood mononuclear cells, when stimulated with crude cryptosporidial antigen, contained IL-10 but not IFN-γ.

The patient’s protracted, severe cryptosporidiosis that resulted in death at the age of 2 years, together with raised serum IgM levels, points toward the diagnosis of immunodeficiency with hyper-IgM [2]. This rare primary immunodeficiency is characterized by low levels of IgA and IgG and increased or normal levels of IgM. The most frequent X-linked form is a result of mutations in the CD-40 ligand (CD-40L) gene, and patients with other forms may have an intrinsic B cell defect [3]. The numbers and function of T cells are normal in patients with this disorder [4]. Therefore, it would be of interest to know this patient’s absolute leukocyte and lymphocyte counts and if the authors investigated CD-40L expression and serum immunoglobulin levels in follow-up examinations.

Srdjan Pasic
Northern Supraregional Bone Marrow Transplant Unit, Department of Paediatrics, Newcastle General Hospital, Newcastle upon Tyne, United Kingdom

References