commenting that Imai et al used recombinant hEPO and not endogenous hEPO.

Furthermore, during discussion of our results, Storring and Yuen did not take into consideration the fact that our findings of a reduced sialylation of the glycans of human serum EPO referred to the isolated sugar part, which cannot be directly compared to studies of the charge pattern of the intact glycoprotein. This point has previously been elaborated by Tsuda et al, who reported that the glycans from rhEPO contained more sialic acids than glycans from human urinary EPO, indicating that sugar from human urinary EPO is more basic than sugar from rhEPO.

In addition, we have presented results obtained from the analyses of serum EPO from anemic patients that must be taken into consideration when interpreting our results. In our paper all relevant reports, including the papers mentioned by Drs Storring and Yuen, were thoroughly referred to and discussed.

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To the editor:

Should patients with FMF undergo BMT?

Recently, Milledge et al reported a patient suffering from both CDA (congenital dyserythropoietic anemia) and presumptive FMF (familial Mediterranean fever). They observed that the patient had CDA (congenital dyserythropoietic anemia) and presumptive FMF. The diagnosis of familial Mediterranean fever (FMF) in our patient was initially a clinical one, although perhaps her disease might better be described as familial paroxysmal polyserositis rather than FMF, as it was the characteristic recurrent serositis rather than the fever that led to the clinical diagnosis at 14 months of age. Her clinical presentation was given in brief in the case report, but we are happy to expand on this here. She presented with recurrent joint swellings of the elbows and knees, which were asymmetrical. She showed exquisite sensitivity to colchicine, with

References


Response:

Bone marrow transplantation for FMF

Dr Touitou raises questions about the diagnosis of FMF in our patient and the temporal relationship between disappearance of symptoms and the transplantation.

The diagnosis of familial Mediterranean fever (FMF) in our patient was initially a clinical one, although perhaps her disease might better be described as familial paroxysmal polyserositis rather than FMF, as it was the characteristic recurrent serositis rather than the fever that led to the clinical diagnosis at 14 months of age. Her clinical presentation was given in brief in the case report, but we are happy to expand on this here. She presented with recurrent joint swellings of the elbows and knees, which were asymmetrical. She showed exquisite sensitivity to colchicine, with
rapid response in her symptoms after 1-2 doses of colchicine and clinically her grunting respiration and tachypnea (taken as evidence of pleuritic involvement) also responded rapidly to this therapy. Although she responded to colchicine, she suffered frequent attacks, and this was not the prime reason for her undergoing bone marrow transplantation (BMT). She did have some symptoms and signs that were not typical of FMF. Her diarrhea was felt to be related to exacerbation of her lactose intolerance with the use of colchicine, and her hepatomegaly was related more to her CDA than FMF. Dr Touitou raises other possible diagnoses. The patient being Egyptian rather than northern European without an elevated IgA makes a diagnosis of hyperimmunoglobulinaemia D with periodic fever syndrome unlikely. Unfortunately we do not have a pre-BMT specimen on which to check her IgD level, but her urinary mevalonic acid was not elevated.

With regards to the possible diagnosis of chronic infantile neurologic cutaneous and articular syndrome (CINCA), our patient was lacking 2 of the cardinal features of the triad, namely a cutaneous rash and chronic meningitis, and so we believe this diagnosis to be extremely unlikely.

There was a close temporal relationship between the start of the BMT countdown and the disappearance of her elbow swelling, despite her stopping colchicine. None of her symptoms have recurred and the patient failed to show any signs of recurrence when she was stressed by bacterial sepsis at 14 months after BMT, when she was off all immunosuppressive drugs. We feel confident in our diagnosis of FMF in this patient and find it implausible that she had a spontaneous remission of 3 years that coincided with the onset of conditioning for her BMT.

We agree that it is possible that this patient was merely a carrier for the Met680Ile mutation. There are many examples in human genetics of clinically or biochemically well-characterized disorders where a disease-causing mutation is not found in the coding sequence of the gene associated with that disorder, for instance, in ornithine transcarbamylase deficiency and Rett syndrome.

The author does point out 2 typographical errors, which should have been corrected in the galley proofs. The symbol “Δ” was used for “del.” This was lost in a font change and was to converted to “D,” which was then expanded to the 3 amino acid code of “Asp”. The MEFV-encoded protein does contain 781 amino acids and not 791.

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References