Reviewer's report

Title: Cerebral relapse of metastatic gastrointestinal stromal tumor during treatment with imatinib mesylate: Case report

Version: 1 Date: 16 August 2004

Reviewer: Ian Judson

Reviewer's report:

General
This is an excellent report on a rare complication of GIST, i.e. CNS relapse. As explained, imatinib does not readily cross the blood-brain barrier and hence the CNS can be a sanctuary site for tumour. Clearly disease elsewhere was under control when CNS disease was progressing.
It is interesting that the patient had an exon 9 mutation. There was no evidence of acquired additional mutations in the cerebral tumour. Typically, patients with exon 9 mutations have a reduced response rate to imatinib and duration of remission is shorter compared with the commoner exon 11 mutant tumours (as discussed in Ref 8 Heinrich et al). Whether or not the disease is intrinsically more aggressive is unclear.
It does not appear that radiotherapy was given. While GIST is considered relatively radioresistant, in the context of the abdomen, where it is difficult to deliver radical doses, there might have been a role for radiotherapy in this case, perhaps given stereotactically.
The Conclusions are entirely appropriate.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
The fact that exon 9 mutant GIST does not respond as readily as exon 11 mutant disease should be mentioned in the Discussion, and could be relevant, given that reduced sensitivity would add to the major problem of failing to obtain adequate drug levels in the brain.
GISTs does not require an apostrophe

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I have acted as an advisor to Novartis and received honoraria for speaking at Novartis sponsored symposia on GIST.