Correspondence

Diagnosis and treatment of Pneumocystis carinii pneumonia

Sir,

Lipson et al. (1977) report success in all 7 of their patients with Pneumocystis carinii pneumonia treated with cotrimoxazole alone. We would like to make some cautionary observations based on a successfully treated child.

A 4-year-old girl with acute lymphoblastic leukaemia in remission for 15 months was seen at a routine follow-up clinic. Although symptom free, she appeared slightly cyanosed and tachypnoeic and a chest x-ray showed diffuse changes. A diagnostic needle aspiration of the lung was performed and Pn. carinii was identified (by Dr John Lever). Cultures of the remainder of the aspirate for viruses, fungi, and bacteria were sterile. Despite early treatment with high-dose cotrimoxazole, the child's condition deteriorated steadily over 3 days. Pentamidine iodothionate was added and her condition thereafter improved; there were no complications.

We would like to make 3 points: (1) The child was symptom free on the day of diagnosis. (2) Needle aspiration was a safe, rapid means of diagnosis. Of the cases reported by Lipson et al. (1977), 2 out of 14 had serious complications from open lung biopsy. This contrasts with one mild episode of transient haemoptysis complicating 8 needle aspirations in children with pneumonia at Bristol Children's Hospital (personal observations). Open biopsy may of course be indicated after a negative needle aspiration when Pn. carinii infection is strongly suspected (Hughes, 1977). (3) Cotrimoxazole appeared to be ineffective in the first 3 days of treatment, in contrast to the observation by Lipson et al. that the drug 'seemed to have a rapid onset of action'. Hughes (1977) reported failure of cotrimoxazole therapy in 3 out of 14 children with Pn. carinii pneumonia.

We conclude that needle aspirate is the investigation of choice when Pn. carinii pneumonia is suspected, and that cotrimoxazole is not necessarily effective in all cases.

References


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Sir,

The report by Lipson et al. (1977) prompts us to report our recent experience with 2 cases of Pneumocystis carinii pneumonia, one aged 9 years and one 3 months, who were under treatment for systemic lupus erythematosus and acute lymphatic leukaemia respectively. Clinical diagnosis of Pn. carinii pneumonia was made on the basis of fever, increased respiration rate, and chest x-rays. The agent was shown in tracheal washings (2 ml saline solution under anaesthesia using N2O-O2-halothane), but was absent from sputa and gastric juice (Chan et al., 1977). The patients' general conditions did not permit lung biopsy or lung aspiration (Cohen and Weiss, 1971). Both were treated first with pentamidine iodothionate, further.