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daily. Despite his initial recovery the patient's condition worsened and he died 12 days after admission.

## Discussion

This case demonstrates that *C. famata* may act as a central nervous system pathogen in immune-compromised individuals.

A study conducted on mice previously treated with cortisone<sup>9</sup> demonstrated the organism's potential to invade the central nervous system under immune-compromising conditions. Of these infected animals, 50% were killed while this species proved non-pathogenic to normal mice with no gross pathology, microscopic lesions or positive tissue cultures at the end of the experiment.<sup>9</sup>

Our patient demonstrated a chronic clinical picture, with CSF special investigations supporting the diagnosis of meningitis caused by a fungal pathogen, with increased CSF lymphocytes, elevated CSF-protein and positive fungal culture being most suggestive. Fluconazole treatment for *C. famata* infections has reported mixed success,<sup>4,5</sup> with one case of successful treatment of catheter-associated fungaemia after administration of amphotericin B.<sup>1</sup> Successful therapy with fluconazole for yeast infections usually requires intravenous dosing, early commencement of therapy and an adequate dosage, this patient being a case in point, with delayed treatment and ineffective oral dosing probably leading to his death. The role of HIV as an immunosuppressive condition and possible co-factor for *C. famata* infection of the central nervous system could not be further investigated due to the death of the patient. *C. famata* is an uncommon human pathogen with few documented infectious conditions. The case

presented shows the organism to be a possible novel pathogen in the human central nervous system. Failure to identify and recognise *C. famata* as a pathogen, combined with delayed therapy, especially when occurring in immune-compromised patients, may lead to unnecessary fatalities.

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## Exclusive breast-feeding — a pipe dream?

**To the Editor:** In South Africa there is scepticism about the feasibility of exclusive breast-feeding (EBF) — despite success stories from Mexico, Bangladesh and Belarus.<sup>1-3</sup> We report on the steps taken to develop a breast-feeding counselling and support strategy, which supports EBF, in a rural subdistrict in KwaZulu-Natal, where mixed feeding was the norm. Prior research showed that traditional beliefs and concerns about milk sufficiency or infant satiety/health were the main reasons for mixed feeding.<sup>4</sup>

Between May and September 2000 we recruited matriculated women, living in the subdistrict, as breast-feeding counsellors (BCs). They were trained using the WHO/UNICEF breast-feeding counselling training course,<sup>5</sup> a 40-hour course with a strong counselling component. Knowledge before and after

training was assessed using a tool developed by the study team. A field guide, containing information from the course and appropriate suggestions addressing traditional beliefs that hinder EBF, was developed as an *aide-mémoire* to facilitate quality, consistent breast-feeding counselling. All BCs were trained to use the field guide. BCs recruited pregnant or breast-feeding women at clinics, and visited them at home at least once a week. The involvement of influential family members during home visits was encouraged. During each home visit, using the listening and learning skills from the course,<sup>5</sup> BCs asked how feeding was going, whether additional feeds or fluids were given to the infant and reasons for these, and about breast health. They observed a breast feed, and then counselled the mother (and often the family) using 'building



**Table I. Six elements of a successful strategy to promote exclusive breast-feeding**

Element	Exposition
Community-based	<ul style="list-style-type: none"> <li>Recruit local persons and gain the support of health professionals living in the area so that consistent messages are communicated</li> <li>Developed appropriate messages that address knowledge, attitudes, traditional beliefs and practices that hinder EBF</li> <li>Strengthen local beliefs that support exclusive breast-feeding</li> </ul>
Training with a strong counselling component	<ul style="list-style-type: none"> <li>Use a standardised course with a strong counselling component such as the WHO/UNICEF breast-feeding counselling training courses to increase knowledge and skills</li> </ul>
Measure the impact of training	<ul style="list-style-type: none"> <li>Use tools, e.g. questionnaires, to assess knowledge, and a checklist to assess breast-feeding counselling skills to measure the impact of training</li> </ul>
Ensure consistent, quality counselling	<ul style="list-style-type: none"> <li>Use a field aid that reinforces information and provides appropriate suggestions that address traditional beliefs which hinder EBF, to facilitate consistent, high-quality counselling</li> </ul>
Supervision Ongoing support, including home support, for breast-feeding women	<ul style="list-style-type: none"> <li>Ongoing supervision for BCs is crucial</li> <li>In the current context where mixed feeding is the norm, ongoing support is needed to address common concerns about EBF</li> <li>Infant feeding is determined by complex relationships in the home. Involvement of other influential household and family members is therefore critical</li> </ul>

confidence and support' skills.<sup>5</sup> Trainee supervisors (ex-BCs) provided on site support to BCs. Weekly meetings (study paediatricians and BCs) facilitated further learning.

We found that despite having no previous training in health care, BCs acquired knowledge quickly: the mean pre-course score was 52% (range 36 - 76%), while post-course scores were 80% (range 68 - 96%) immediately after the course, and 80% (range 66% - 92%) 3 months after the course. The average score in an open book assessment based on the field guide was 85% (range 66 - 99%). Although BCs initially 'intervened' rather than 'counselled', regular practice resulted in their becoming powerful counsellors, acquiring counselling skills more quickly than health care workers. Preliminary data found that 2 months into the intervention EBF rates had risen from less than 10% at 16 weeks<sup>4</sup> to 49% at 20 weeks. Our experience leads us to believe that six elements are needed for a successful breast-feeding counselling and support strategy (Table I). These elements need to be incorporated into child health interventions to ensure sustainability.

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