



LETTERS TO THE EDITOR

Anemia in the recent reported cases of bird flu infection in Thailand and Vietnam

Bird flu or avian flu, caused by H5N1 virus, is a new emerging infectious disease. In 2004, this H5N1 virus jumped the species barrier and caused severe disease with high mortality in humans in Vietnam and Thailand. Most infected cases usually developed progressive pneumonia with acute respiratory distress syndrome and consequently died. Here, the author performed this mini-study in order to document the anemia manifestation among reported Thai and Vietnamese patients. A literature review on the papers concerning human bird flu in Thailand and Vietnam was performed from database of the published works cited in the Index Medicus and Science Citation Index and also the published works in all 256 local Thai journals, which are not included in the international citation index. The reports that contained no complete data were excluded for further analysis.

According to this review, there were seven reports¹⁻⁷ covering 22 Thai and Vietnamese patients with a firm diagnosis of bird flu. The reported hemoglobin (Hb) ranged from 10.0 to 17.6 g/dl with an average value equal to 13.0 ± 1.7 g/dl (median = 12.9 g/dl). Of the 22 cases, five cases or 22.7% (two Vietnamese and three Thai) according to WHO criteria ($Hb \leq 12$ g/dl). These findings can imply that anemia might be an important manifestation of human bird flu infection. H5N1 itself might cause red blood cell pathology leading to anemia. Further investigation is needed to clarify this finding.

References

1. Grose C, Chokephaibulkit K. Avian influenza virus infection of children in Vietnam and Thailand. *Pediatr Infect Dis J* 2004; **23**:793-4.
2. Chotpitayasunondh T, Lochindarat S, Srisan P. Cases of influenza A (H5N1)—Thailand, 2004. *Wkly Epidemiol Surveill Rep* 2004; **5**:100-3.
3. Chotpitayasunondh T, Lochindarat S, Srisan P. Preliminary clinical description of influenza A (H5N1) in Thailand. *Wkly Epidemiol Surveill Rep* 2004; **35**:89-92.

4. Chokephaibulkit K, Uiprasertkul M, Puthavathana P, Chearskul P, Auewarakul P, Dowell SF, et al. A child with avian influenza A (H5N1) infection. *Pediatr Infect Dis J* 2005; **24**:162-6.
5. Centers for Disease Control and Prevention (CDC). Cases of influenza A (H5N1)—Thailand, 2004. *MMWR Morb Mortal Wkly Rep* 2004; **53**:100-3.
6. Apisarnthanarak D. FIC Article center, atypical avian influenza (H5N1). [Available at <http://www.flu.org.cn>].
7. Tran TH, Nguyen TL, Nguyen TD, Luong TS, Pham PM, Nguyen VC. Avian influenza A (H5N1) in 10 patients in Vietnam. *N Engl J Med* 2004; **18**(350):1179-88.

Viroj Wiwanitkit
 Department of Laboratory Medicine, Faculty of
 Medicine, Chulalongkorn University, Bangkok
 10330, Thailand
 E-mail address: wviroj@yahoo.com

© 2005 The British Infection Society. Published by Elsevier Ltd.
 All rights reserved.

doi:10.1016/j.jinf.2005.05.024

Infectious complications of traditional Samoan tattooing

We read with interest the cases of necrotising fasciitis and cellulitis after traditional Samoan tattooing in New Zealand reported by Porter et al. in the last issue of the journal.¹ The authors state that life threatening infectious complications had not previously been described for either traditional Samoan or contemporary tattooing. However, we reported a case of polymicrobial septicaemia with *Pseudomonas aeruginosa* and *Streptococcus pyogenes* following traditional Samoan tattooing in Australia in the pages of this journal in 1997.² We also cited previous reports of fatal septicaemia due to *P. aeruginosa* following periorbital tribal tattooing in a Nigerian infant,³ and the isolation of *Streptococcus pyogenes* and *Staphylococcus aureus* from infected tattoos performed by non-professional tattooists.⁴

References

1. Porter CJ, Simcock JW, Mackinnon CA. Necrotising fasciitis and cellulitis after traditional Samoan tattooing: case reports. *J Infect* 2005;50:149-52.
2. Korman TM, Grayson ML, Turnidge JD. Polymicrobial septicemia with *Pseudomonas aeruginosa* and *Streptococcus pyogenes* following traditional tattooing. *J Infect* 1997;35:203.
3. Mathur DR, Sahoo A. *Pseudomonas* septicaemia following tribal tattoo marks. *Trop Geog Med* 1984;36:301-2.
4. Barnham M, Kerby J. A profile of skin sepsis in meat handlers. *J Infect* 1984;9:43-50.

Tony M. Korman*

Department of Infectious Diseases, Monash Medical Centre, 246 Clayton Rd, Clayton, Vic. 3168, Australia

E-mail address: tony.korman@med.monash.edu.au

M. Lindsay Grayson

Department of Infectious Diseases, University of Melbourne, Austin Hospital, Heidelberg, Vic., Australia

John D. Turnidge

Department of Microbiology and Infectious Diseases, Women's and Children's Hospital, Adelaide, SA, Australia

Accepted 23 February 2005

* Corresponding author. Tel.: +61 3 9594 4563; fax: +61 3 9594 4533

© 2005 The British Infection Society. Published by Elsevier Ltd. All rights reserved.

doi:10.1016/j.jinf.2005.02.024

Why don't we just do what we have to do?

Sir,

Different series have reported that the incidence of endophthalmitis in patients with candidaemia have been as high as 28-45%.¹⁻³ In addition, it is well known that eye involvement in disseminated candidosis may increase morbidity and prolong the necessity of anti-fungal therapy. Based on these observations, it is a consensus that all patients with candidaemia should have at least one dilated retinal examination, preferably by an ophthalmologist.^{4,5} Neutropenic patients may not manifest visible endophthalmitis until recovery from

neutropenia, and, therefore, ophthalmological examination should be performed after recovery of the neutrophil count.⁴ The aim of this observational study was to retrospectively evaluate the proportion of patients with candidaemia who had a fundoscopic examination performed in our medical centre. This was a 9-year study (1995-2003) conducted in Santa Casa Complexo Hospitalar, Brazil. Only patients who had the diagnosis of sepsis at the time of blood sampling were included. From a total of 210 patients with candidaemia, only 7.6% ($n=16$) had an ocular examination performed, and neither *Candida* endophthalmitis nor *Candida* chorioretinitis was reported. The information of who performed the retinal examination (an ophthalmologist or other medical doctor) was inconsistent in the charts. Fundoscopic examination was more frequently performed in preterm neonates (risk ratio 4.25; CI 1.68-10.71), and in patients receiving parenteral nutrition (risk ratio 4.17; CI 1.58-10.96). In contrast, the risk ratio for not-performing retinal examination was 1.12 (CI 1.04-1.20) in cancer patients. When patients were stratified according to severity of candidaemia (APACHE-II in adults and PRISM in children) no difference in the frequency of ocular examination was seen. No difference was also perceived in variables such as admission in the intensive care, invasive mechanical ventilation, shock or neutropenia. No difference in the mortality rate was observed among patients who had an ocular examination and those who had not. Other results were published elsewhere.⁶ Since, disseminated candidosis involving multiple foci is common in neonates,⁷ this may be the reason for the higher proportion of fundoscopic examination in these patients. In addition, many of these patients had an ophthalmologic consultant to exclude retinopathy of prematurity. However, the overall low frequency of retinal examination among our patients with candidaemia has surprised us. We are not aware of previous studies revealing similar results, especially in cancer patients. The reasons for these findings are obscure. As Santa Casa Complexo Hospitalar is a teaching hospital, difficult access to ophthalmologists cannot be the main justification. It is possible that the retrospective design of this study may have led to loose of information, underestimating the real frequency of retinal examination in this cohort. We would favour the hypothesis that the frequency of fundoscopic examination in 'real life' candidaemia patients may be far different from the data published in clinical trials. Continuing medical education seems to be required to our medical staff, in order to improve these results.