sexual intimates in Farnham and colleagues' study included more people with previous convictions than strangers and acquaintances, there is a possibility that the association between serious violence and intimacy was a sham and that actually, serious violence was significantly associated with previous convictions.

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# High necropsy rates: just a ritualistic mantra?

Sir—We believe that Peter Hall (Dec 4, p 2004)¹ is wrong when he states that a small number "of targeted, well-conducted necropsies" may be superior to large numbers of examinations that do not have "the crucial step good clinical contact". However, these two possiblities are not mutually exclusive. The optimum scenario is a high rate of necropsies (which in fact increases and facilitates the interaction) with clinico-pathological contacts.

Hall calls for the evidence of a correlation between necropsy rates and a better clinical practice and for the minimal rate required to guarantee a sufficient feedback for the clinician to be outlined. While we are awaiting hard facts to answer these questions, we believe that it is wrong to reduce the number of necropsies to a "targeted" small number, because it is hard to target for the unexpected and it is the unexpected findings that make necropsies a valuable teaching aid. We, and others, have shown that 10% of necropsies indicate clinical a management different from what the patient received, 20% reveal a different or additional diagnosis that was not known during the patient's lifetime, and 60% have a strong teaching point.2

If we have doubts about the impact of necropsy findings on clinical practice we should just ask: what better lessons learned can you think of than the ones you remember for a lifetime? Our young doctors will never forget the case of unsuspected and undiagnosed pulmonary tuberculosis in a patient with metastatic pulmonary carcinoma. Such a patient would not have been

"targeted" by Hall's method and hence would have gone undetected.

Hall further asks whether eastern European countries with high rates of necropsies provide better healthcare. While this question appears somewhat unfair, the argument is really the other way round: less advanced technical possibilities (but excellent clinicians) will rely even more heavily on necropsies as an instrument of quality control if access to scanning machines and catheter laboratories, and so on, are lower.

"Necropsies are time consuming and expensive" and "the UK and other countries has a shortage of pathologists", says Hall. He is right, but we will not solve this problem by taking away or minimising a cornerstone of medical education: necropsies.

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# Danger from rabiesinfected bats

Sir—Insectivorous bats harbour Lyssavirus spp, and in western countries, bats are most often the source of human rabies. Bat rabies is endemic in mainland Europe, and the British Isles and Australia have seen their first infected bats. In the USA, from 1990 to 1997, bats caused 19 of 21 cases of rabies.1 Rabies is not widespread in bats, but encounters with bats are often misunderstood by their victims.1 People instinctively fear aggressive rabid dogs, but, because bats usually avoid other vertebrates, are unaware of the behavioural signs indicating infection in bats.

For example, in a zoo population of 42 flying foxes, two of five rabies-infected bats lost orientation and trapped themselves in a ventilator tract,² but this unusual behaviour was regarded as a coincidence and not attributed to illness in the bats. Now, respective data from Colorado suggest that rabies-infected bats are over represented in bite accidents.³ I describe rabies-related behaviour of bats and to compare it with normal

One evening, late in May, a 44-yearold man living on Zealand in Denmark suddenly awoke as a bat was biting his hand. He threw the wheezing bat off, which then fell behind a cupboard and became trapped. The millimetre deep bite wound was cleaned, and 5 hours later the man received rabies vaccine and immunoglobulin. Examination of the bat's brain with oligoclonal antibodies showed that this adult female of the common *Serotine* spp was severely infected with genotype-5 European Bat Lyssavirus (virus cultures grew positive within only 2 days). 9 months later, the man remains well.

The behaviour of the bat is probably attributable to encephalitis, but in many ways it resembles that of daily active hypothermia (hibernation).<sup>4</sup> Bats inhabit lofts and occasionally become trapped inside houses: hungry and cold they save energy by lowering their temperature, and once they are torpid they no longer avoid contact with human beings.

Latin American vampire bats attack other vertebrates; insectivorous bats do not. And most bats behaving in an apparently strange wav hypothermic. However, a close accidental encounter with an encephalitic rabies-infected bat is likely to result in a bite, and therefore sick bats should not be approached. That hands are the most often bitten bodyparts (59%)3 suggests that human beings are not always passive victims.

I thank bat expert Hans Baagøe for valuable discussion, and Leif Rønsholt for examination of the bat.

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## **DEPARTMENT OF ERROR**

Pandora's box opened: 1000 years of war and disease—In this Supplement item by Wolfgang U Eckart (*Lancet* 2000, p SIV63), the legend to the picture should be "Tyne Cot cemetery at Passchendaele, Belgium".

Report urges changes in investigation of sudden infant deaths in England—In this News item by S Ramsay (Feb 5, p 476), the third sentence of the second paragraph should be, "The study confirmed that factors such as a <u>prone</u> sleeping position and exposure to tobacco smoke increase the risk of SIDS".