

achievement of adequate muscle relaxation for successful laryngoscopy is critical in reducing the risk of hypoxia and aspiration. This is especially so in emergency intubation where pre-oxygenation may give only limited oxygen reserve and the risk of aspiration is ever-present. Hypoventilation and even apnoea will occur before adequate airway muscle relaxation. Ventilating the patient during this time increases the risk of gastric distension and regurgitation.

If intubation fails, the longer the recovery time, the greater the risk of airway obstruction and aspiration. A key factor in the continued use of suxamethonium in RSI instead of rapid onset non-depolarising agents is its short duration of action. This enables rapid recovery of airway and respiratory muscle function. Both morphine and diazepam can be 'reversed' with naloxone and flumazenil, respectively, but this further complicates the pharmacological management.

Hypoxia during a prolonged intubation is a major secondary insult in a head-injured patient, especially when combined with hypotension. It is hypoxia and hypotension that kill, not failure of intubation. Pharmacology that increases the risk of hypoxia and hypotension should be abandoned. Rapid-sequence oral intubation using neuromuscular blockade is the safest, quickest and most efficacious means of establishing a secure airway. Emergency airway management in North America followed a convoluted path before 'discovering' RSI. Let's not repeat that experience in Australasia.

Finally, might I suggest an alternative to the considerations of adding neuromuscular blockade to paramedic protocols or introducing surgical airway techniques. Add an emergency physician to the flight crew.

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Rod Bishop FACEM

Staff Specialist, Department of Emergency Medicine,
Nepean Hospital, Penrith, NSW, Australia

Emergency sedation intubation: Reply

We thank Dr Bishop for his comments. Although the retrospective nature of this study did not allow collection of as much detailed data as might have been ideal, our aim in reporting this research was to provide some objective data about the practice and outcomes of emergency sedation intubation (ESI) on which further debate or investigation could be based. Dr Bishop points out the potential adverse effects of the use of morphine and diazepam in relatively high doses to facilitate endotracheal intubation. We agree that the risks of this approach, particularly for the brain injured, are significant. As stated in our paper, we believe that a review of the protocol for drug-assisted intubation is warranted. There is now good evidence that rapid sequence intubation techniques using suxamethonium are safe in the hands of paramedics. This method would also avoid many of the potential adverse effects of ESI.

Professor Anne-Maree Kelly

Director of Emergency Medicine,
Western Hospital, Footscray, Vic, Australia

Emergency physicians' role in managing HIV seroconversion illness: Take stock or take HAART?

Cannon and McCarthy¹ propose emergency physicians adopt an 'enhanced role' in the management of 'HIV seroconversion illness'. The latter is a mundane set of symptoms and signs 'legitimized' by 'HIV-specific antibodies' which 'usually develop 2-6 weeks after onset of symptoms'. To obtain antigens and the HIV genome and determine the specificity of the HIV antibody and RNA tests, first one must purify, that is isolate, the HIV particles.

Although both Montagnier and Gallo claimed such proof in 1983/84,²⁻⁴ neither group published electron

micrographs (EM) of 'purified HIV'. In experiments conducted 14 years later, EM of 'purified HIV' revealed material that is over 99% cellular containing scant particles bearing little or no resemblance to retroviruses (an EM of 'purified HIV' can be seen at <http://www.virusmyth.com/aids/award.htm>).^{5,6} Interviewed in 1997 as to why, in 1983, the Pasteur Institute did not publish EM of the material claimed to be 'purified virus' and to prove the existence of HIV,² Montagnier replied, 'We saw some particles but they did not have the morphology typical of retroviruses'. Questioned about whether the Gallo group purified HIV, Montagnier replied, 'Gallo? I don't know if he really purified. I don't believe so'.⁷

As far as emergency physicians administering the 'new antiretroviral agents' is concerned, it is prudent to note that when these agents were first introduced Dr Andrew Carr at St. Vincent's Hospital, Sydney, commented, 'It is therapeutic chaos. Doctors are prescribing what patients ask for, or they're guessing, adding different drugs when they feel like it. I've never seen anything in medicine quite like it'.⁸ By way of contrast, Dr Donald Abrams, Professor of Medicine and Director of the AIDS program at San Francisco General Hospital, lectured his medical students, 'I have a large population of people who have chosen not to take any antiretrovirals ... I've been following them since the very beginning ... They've watched all of their friends go on the antiviral bandwagon and die'.⁹ In fact, a factor common to long-term survivors of AIDS is the non-use of 'antiretrovirals'.¹⁰⁻¹² In May 1998, Dr William Paul, former Director of the US National Institutes of Health's (NIH) Office of AIDS Research wrote, 'no matter how long a person is treated with anti-HIV drugs, there will always be new viruses ... you will have to be treated forever ... No one is getting cured ... This bodes extremely poorly for combination therapy as something curative'.¹³ Interviewed in March this year, Dr Michael Saag, Director of the AIDS clinic at the University of Alabama, with over one thousand AIDS patients, said, 'Perhaps the biggest difference between the cure paradigm and whatever paradigm we're in now is, we now should expect failure with whatever [HAART cocktails] we first use. We should plan on it. We should prepare for it. Clinicians should expect failure'. During one year, 157 of Saag's patients collectively took 189 different drug formulas with only three patients taking the same mix of HAART drugs. Saag warns that the HAART '... "dam" is already leaking and there's high danger of it collapsing altogether. Failures are

occurring right and left ... It is sobering ... while we are making good guesses, they are just guesses. We don't know what we are doing. Hubris! Hubris!'.¹⁴ Dr Harold Varmus, Nobel Laureate retrovirologist and Director of the NIH believes, 'Trying to rid the body of a virus whose genome is incorporated into the host genome may be impossible'.¹⁵

In my view, emergency physicians should be extremely guarded about diagnosing and treating 'HIV seroconversion illness'. Indeed, given that: (i) the specificity of the 'HIV' antibody and PCR tests remains unproven;¹⁶⁻²¹ (ii) 'diagnostic tests that detect viral antigen' are non-specific;²²⁻²⁴ (iii) in the best laboratories the concordance between HIV serology and 'HIV DNA' varies between 40 and 100%;²⁵ (iv) 'Plasma viral load assays are designed for monitoring the effectiveness of antiretroviral therapies and for measuring the quantity of virus in patients with confirmed HIV infection, not for the diagnosis of HIV infection. Their performance in patients who are not infected with HIV is unknown' and their use leads to 'Misdiagnosis of HIV infection';²¹ (v) 'The AMPLICOR HIV-1 MONITOR (PCR) Test is not intended to be used as a screening test for HIV-1 or as a diagnostic test to confirm the presence of HIV-1 infection' (Roche Diagnostics, Branchburg, New Jersey, Art. 07 5623 7); emergency physicians should be most reluctant to diagnose this 'illness'. Among the many consequences are suicide²⁶ and the administration of disproven, unproven and toxic 'antiretroviral' medications.²⁷⁻³⁴ On the other hand, because emergency physicians are more likely than non-AIDS specialists to be involved with HIV/AIDS cases, especially needlestuck patients, they should insist on a full, urgent and open debate in order to resolve these matters while guarding their patients' wellbeing and their own reputations.

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Valendar Turner, FRACS, FACEM
Department of Emergency Medicine,
Royal Perth Hospital,
WA, Australia

Emergency physicians' role in managing HIV seroconversion illness: Take stock or take HAART?

Reply

Turner, in his response to our review of the role of emergency physicians in the diagnosis of the HIV

seroconversion illness, argues that definitive diagnosis of acute HIV infection and subsequent management of such patients is complex and beset by controversy, and that emergency physicians have no role in this setting. With respect to the complexity we have no argument, with respect to the controversy we believe that there is general consensus on important principles, including the role of the HIV virus in the causation of AIDS.¹ Further, we maintain that the controversial issues will only be resolved by controlled clinical trial, a position we adopted in our review.

However, our view is that emergency physicians should be alert to the presentation of patients with an illness consistent with this diagnosis (a glandular fever-like illness associated with appropriate epidemiological factors) and should institute appropriate diagnostic tests to confirm the diagnosis. Following the correct identification of such patients, early institution of therapy likely has a profound influence on the subsequent course of the infection, a view supported in a recent review in the *New England Journal of Medicine*,² and by recent guidelines published by the Centers for Diseases Control of the United States.³

The annual incidence of newly diagnosed HIV infection in Australia (787 in 1997,⁴ of which at least 20% likely represents acute infection) exceeds that of other uncommon conditions such as significant envenomation, electrocution and the bends, conditions seen as the province of expertise of the emergency physician. We believe that it is incumbent on those practicing in our specialty to be aware of the significance of this syndrome and the likely improvement in patient outcome that will result from its correct identification. This is in contrast to the

situation prevailing prior to the advent of HAART in 1997, a period from which 18 of Turner's references are drawn.

We agree with Turner that the interpretation of test results in this clinical setting can be confusing to the non-expert. However, the disposition of such patients and the time frame before the results are available generally imply that the interpretation of results will be undertaken by those knowledgeable in the area with an appreciation of the relative strengths and weaknesses of such tests, some of which were noted by Turner. Thus, the correct diagnosis can be arrived at and subsequent antiretroviral therapy, if indicated, can be initiated by those with an up-to-date knowledge of the rapidly evolving therapeutic antiretroviral armamentarium.

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Marianne E Cannon
Emergency Department,
James S McCarthy
University of Western Australia, Department of Medicine,
Fremantle Hospital,
Fremantle, WA, Australia