

In summary, we have described the infection control guidelines and patient triage policy of our unit for experience sharing with other neonatal clinicians. The aforementioned model should be modified and adjusted according to the needs of individual units. Further, such a policy requires regular review and modification to cope with the rapid and unforeseeable changes in future circumstances. Although our system has not been vigorously challenged by SARS admissions, the adult intensivists in our hospital have been very successful in preventing cross infection of SARS between patients and staff using a similar regimen.<sup>9</sup> Some of the measures used in our protocol, such as the frequent disinfection and cling film wrapping of commonly touched surface, and the use of powered air purifying respirators, were introduced on an empirical basis and may be regarded as going beyond standard recommendations for infection control. However, until the mode of transmission of the SARS associated coronavirus is better understood, a stringent approach to infection prevention is probably warranted. At the beginning of the outbreak in early March, we did not have any guidelines on how to deal with the situation for neonates. We hope that this report is useful in helping other NNUs to formulate their own infection control measures to fight against this infectious and deadly disease.

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## IMAGES IN NEONATAL MEDICINE.....

### Use of a butterfly as an intraosseous needle in an oedematous preterm infant

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The technique of intraosseous line insertion can be useful in the neonate when venous access has proved difficult. In this infant, born at 25 weeks gestation, a prolonged illness required the insertion of a number of lines including percutaneous long lines and an internal jugular line. After an initial recovery and removal of these lines, a further acute deterioration and the development of gross oedema made the insertion of further lines technically difficult. The infant, however, required fluids, antibiotics, antihypotensives, and analgesia, and an 18 gauge butterfly needle was inserted into the left upper tibia after 1% lignocaine (fig 1). After six days, the line was lost. This case shows that, when the more usual routes of access have proved impossible, the intraosseous insertion of a simple butterfly needle can provide a suitable alternative to maintain essential drug and fluid administration. Although no adverse events were identified resulting from the intraosseous line, there are no safety data on the longer term use of these lines.



**Figure 1** An 18 gauge butterfly needle inserted into the left upper tibia.

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