CORRESPONDENCE

Glove puncture in the post mortem room

Weston and Locker document the high incidence of glove puncture in the post mortem room and advocate "frequent glove changes and hand washing throughout the post mortem examination." An alternative is to wear thicker gloves which are less easily punctured. I have used for some time now Long Nitrosolve gloves (Marigold Industrial) over a standard pair of thin surgical gloves. The heavy gloves are resistant to puncture and also afford protection against splashes almost up to the elbow. They feel clumsy at first but soon become used to them. They can be washed and reused several times and so are economical.

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I read with interest the article by Weston and Locker regarding the frequency of glove puncture in the post mortem room. I am sure that few practising histopathologists could argue with their finding that glove punctures, both noticed and unnoticed, are extremely common, and a similar observation was made by Babb et al in 1989, although actual wounds are, in my experience, comparatively rare in experienced staff. This has undoubtedly always been the case in post mortem work and consequently, were it to pose a real rather than a potential health risk, there should be good evidence available. In their morbidity survey of post mortem room staff, Hall et al found no recorded days of absence for skin disorders or cuts and lacerations among histopathologists and a very low number for technicians. Consequently, I would conclude that unnoticed glove puncture is not an important health hazard and would not justify the major expense incurred by using two pairs of gloves for each post mortem examination. It would appear from the available evidence that the risks associated with glove puncture are theoretical rather than real and do not justify multiple glove changes during necropsy examination. The potential for infection is adequately dealt with by normal post mortem room hygiene procedures.

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Diagnostic value of fibronectin determination in cerebrospinal fluid

Torre et al recently reported increased concentrations of fibronectin in the cerebrospinal fluid (CSF) of patients with bacterial meningitis, but not with viral meningitis, as determined by a commercial turbidimetric immunoassay. Their results correspond to our study on the differential diagnostic value of CSF fibronectin determination using an enzyme-linked immunosorbent assay, although their mean (SEM) control concentrations were somewhat higher (6.7 (1.3) mg/l) as opposed to 3.3 (0.3) mg/l and their mean concentrations in bacterial meningitis were lower (13.9 (6.1) mg/l compared with 64.0 (6-3) mg/l in our study. Their observation of decreased fibronectin concentration (2.2 (1.8) mg/l) in viral meningitis is very interesting as we did not find any decrease in various neurological disorders including lumbar disk disease, multiple sclerosis, acute demyelinating polyradiculoneuropathy, Guillain-Barré, neurologically asymptomatic HIV infection, tick-borne encephalitis, and diffuse leptomeningeal neoplasia. However, we detected very high concentrations of CSF fibronectin not only in bacterial meningitis but also in tick-borne encephalitis (26.7 (4.4) mg/l), neuroborreliosis (27.0 (3.6) mg/l), and notably in leptomeningeal neoplasia (58.4 (16.0) mg/l).

Clinical data will help to distinguish infectious from neoplastic cerebrospinal disease in most patients but increased CSF


Dr Weston and Locker comment:
We note that Lindley and Lucas advocate wearing heavy duty gloves over surgical gloves for post mortem examinations. We have ordered some Long Nitrosolve gloves to try out. Dr Lucas suggests that his inner gloves protect him from skin contamination if his outer gloves are punctured. However, as we point out in our paper 31-8% of glove punctures go unnoticed and this is where the danger of prolonged skin contact with potentially infected material lies.

We do not mean to imply that changing gloves frequently and especially at the end of the evisceration protects against hand contamination, but that it prevents prolonged skin contact with contaminated material via an unnoticed glove puncture.

Dr Dunn's opinion that the extra cost incurred by frequent glove changes during postmortem examinations is not justified concerns us. The paper cited reports that one case of tuberculous meningitis and two of hepatitis B occurred in 76 mortuary technicians over 12 months. There were also 21 minor lacerations. While this may not cause much immediate morbidity, the consensus of infection with HIV or indeed with hepatitis B or tuberculosis due to an unnoticed glove puncture would be incalculable. We agree that to date the risk of infection via an unnoticed glove puncture may be slight rather than real, but as the prevalence of HIV increases this trend could well reverse and is not a risk worth taking. All possible protective measures should be practised. This view also seems to be held by Dr Lucas.