ABSTRACT

Very little work seems to have been undertaken in the UK on the potential effects of exposure to impulse noise on hearing for police officers who are authorised to carry a firearm. The British Army have undertaken work on this but the results are not in the public domain. A cross sectional study comparing hearing loss in police firearms officers exposed to impulse noise (n=50) and a control group (n=98) not exposed to impulse noise was undertaken to determine whether there was any significant difference in hearing, as measured by audiogram examination, between the two groups. Previous studies had indicated that impulse noise exposure has the potential to have a detrimental effect on hearing after a relatively short period of exposure.

Volunteers for the study had a simple ear examination followed by an audiogram and completed a questionnaire that covered health issues and previous noise exposure. Statistical analysis of the data indicated that the police authorised firearms officers did not have impaired hearing in comparison to the control group.

This was an unexpected outcome and further studies would need to be undertaken involving larger populations to determine whether this result is valid.