Accuracy of the advanced trauma life support guidelines for predicting systolic blood pressure using carotid, femoral, and radial pulses: observational study

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that in the regions we have studied the direct effect of the moderate warming predicted in the next 50 years would be to reduce, at least briefly, both winter mortality and total mortality. This could be continued into a large, sustained reduction in overall mortality if additional action is taken to prevent relaxation of protective measures against outdoor and indoor cold stress as winters become milder. These findings should not, of course, diminish concerns about possible indirect effects of prolonged global warming, such as flooding of low lying areas due to a rise in sea level or about direct effects of heat stress in hotter regions.

Contributors: WRK and GCD designed the study; WRK is guarantor and drafted the paper, and GCD computed the data. All authors assembled data and contributed to their interpretation and to drafting and revision of the paper.

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Population based, prospective study of the care of women with epilepsy in pregnancy

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This prospective, population based study in the former Northern health region was designed to establish the proportion of pregnant women with a history of epilepsy; doctors supervising their care; effectiveness of preconception counselling and control of epilepsy; and use of medication and pregnancy outcomes.

Subjects, methods, and results

The project had approval from regional ethics committees. Pregnant women with epilepsy were recruited to the study, predominantly by community midwives. Women who consented were interviewed by using a standard questionnaire. Hospital notes were reviewed after the women had given birth. General practice and hospital notes were checked in one area to confirm the women's response regarding preconceptional advice. Between 1 January 1997 and 31 December 1998, 400 notifications of pregnancies to women with epilepsy were received (the total number of livebirths, stillbirths, and medical terminations for this period was 65 478, giving a proportion of all pregnancies to women with epilepsy of 6.1/1000).

Three hundred women were interviewed, 60 did not consent to interview, contact was unsuccessful for 36, and 4 were notified retrospectively. Epilepsy management was undertaken by general practitioners in 182/300 (61%) women; 214/300 (71%) reported ongoing seizures; and 53/252 (21%) women taking antiepileptic drugs reported no seizures for > 2 years. A history of epilepsy was reported by 48 women who no longer took antiepileptic drugs. Of the remaining 252, 210 (83.3%) were on monotherapy, most often carbamazepine (52%) and sodium valproate (35%). The diagnosis of epilepsy was questionable in 16/300 (5%) women. Incomplete compliance with medication was reported by 157/252 (62.3%) women.

Only 113/300 (38%) women recalled receiving preconceptional counselling. However, review of the notes of 25 women who denied having received advice showed that 8 (32%) had been counselled. Less than 50% (88/199) planned their pregnancies and 27/111 reported oral contraceptive failure. Only 32 (11%) took folate appropriately.

Of the 359/400 known pregnancy outcomes there were 330 live births (three sets of twins); two medical terminations, two stillbirths, 22 miscarriages, and five terminations.

The obstetric complication rate and mode of delivery were similar to that of the background population.

Comment

The advanced trauma life support guidelines for assessing systolic blood pressure are inaccurate and generally overestimate the patient's systolic blood pressure and therefore underestimate the degree of hypovolaemia. The minimum blood pressure predicted by the guidelines was exceeded in only four of 20 patients. The mean blood pressure and reference range obtained for each group indicate that the guidelines overestimate the systolic blood pressure associated with the number of pulses present. This study therefore does not support the teaching of the advanced trauma life support course on the relation between palpable pulses and systolic blood pressure.

Contributors: Data collection was carried out by CDD. JLL did the statistical analysis. CDD and JLL both wrote the report. CDD is the guarantor.

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