

the age of 30,²¹ the likelihood of giving birth near the time of a breast cancer diagnosis is significantly greater for women who have their children at an advanced age. Therefore, the adverse influence of pregnancy on breast cancer survival will be greatest when women postpone childbearing to older ages.

The negative effect of recent pregnancy was pronounced in women who did not receive adjuvant treatment (low risk group) as well as among those who did (high risk group). Therefore, it is not known whether more intensive adjuvant treatment will change the course of the disease in these patients. These findings need be considered in counselling such patients and in deciding on adjuvant treatment. Pregnancy history should be recorded for premenopausal breast cancer patients and in prospective clinical trials so that response to adjuvant treatment according to time since last childbirth can be assessed.

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Audit of child protection procedures in accident and emergency department to identify children at risk of abuse

Peter D Sidebotham, Alison V Pearce

Hospital accident and emergency departments are often the first place where injured children come into contact with the health services. Children who are victims of or at risk of abuse may be passing through these departments unrecognised. Accident and emergency departments must have clear protocols for recognising and handling suspected abuse and for training staff and updating that training.^{1 2}

Triage by nurses of all children arriving in the accident and emergency department at the Royal United Hospital in Bath includes checking the child protection register and assessing five indicators of risk for child abuse. These indicators are: whether the child has previously been seen at the department, whether there is an inconsistent medical history, whether the findings on examination match the history, whether there was a delay in bringing the child to the department, and whether there is a head injury or fracture in a child younger than 1 year old. The department has a clear and accessible protocol for the management of suspected cases of child abuse.

Methods and results

A two part audit was undertaken in May 1995 and 1996 to determine the extent to which procedures for identifying and referring children at risk of abuse were being followed in the accident and emergency department. During the two-month audits the record cards of all children attending the accident and emergency department were reviewed. After the initial audit, meetings were held with the local area child protection review panel, hospital management, and accident and emergency staff to share the information and stimulate debate. As a result a number of changes were introduced to the protocol including updating the knowledge of the staff in the accident and emergency department, clarifying which children should be discussed, instituting regular training and feedback sessions, and revising the checklist system for risk indicators.

A total of 1357 cards were reviewed in the first audit and 988 in the second. The table summarises the standards that were achieved. During both audits only five children were identified as being on the child protection

Institute of Child Health, Royal Hospital for Sick Children, Bristol BS2 8BJ
Peter D Sidebotham, consultant paediatrician, community child health
Child Health Department, Bath and West Community NHS Trust, Bath BA1 3QE
Alison V Pearce, lecturer in community child health
Correspondence to: Dr Sidebotham p.sidebotham@bristol.ac.uk

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Table 1 No (%) of times indicator of risk of child abuse marked on checklist during visits by children to accident and emergency at first (1995) and second (1996) audit

Indicator for risk of child abuse	Indicator marked on checklist No (%)*	
	First audit (1995)	Second audit (1996)
Children have all five indicators marked	860/1357 (63.3)	940/988 (95.1)
Child protection register list in accident and emergency checked for all children living in surrounding local authorities	989/1033 (95.7)	801/806 (99.4)
All children with two or more indicators discussed with the on call paediatric registrar	2/52 (4)	8/41 (20)
All children whose names are on the child protection register discussed with the on call paediatric registrar	1/5 (20)	NA
All children < 1 year old with fractures or head injuries referred to the on call paediatric registrar‡	NA	6/12 (50)†

NA=not applicable.

*Target for compliance with checking all indicators was 100%.

†In two cases this was one of two risk indicators; one of these was referred to the paediatrician.

‡Category not included in first audit.

register. This is fewer than would be expected from the local prevalence (47.1 per 10 000) and may reflect variations in prevalence within the boundaries of the local authority.³ The proportion of children with one positive indicator of risk remained constant at 40% (543 children in the first audit; 392 in the second), as did the proportion of those with two (4%; 50 and 40 children respectively), and more than two (0.1%; 2 and 1).

Comment

Clarification of protocols for child protection in the accident and emergency department, regular staff training, and increased communication between paediatricians and nurses in the department led to improvements in identification of children thought to be at risk of child abuse. Improvement was seen in all standards but espe-

cially in those relating to nurse triage. Time spent in training and feedback resulted in the development of good rapport between nursing staff and paediatricians and a commitment to achieve high standards in the child protection procedures. In contrast, the overall rate of referral of children thought to be at risk remained low. Just 3 out of the 57 children (5.3%) identified as being at risk were discussed with paediatricians in the first audit, this increased to 13 out of 51 (25.5%) in the second. Improvements were made in training junior medical staff in issues of child protection; however, with a regular turnover of staff this needs to be sustained and reinforced by close liaison between the accident and emergency and paediatric departments.

This audit showed whether procedures for identifying children thought to be at risk of abuse were being followed. The checklist of indicators of risk does not identify children who have been abused, but merely heightens awareness of those children in whom there are features that might cause concern. What the audit does not show is whether these procedures can accurately identify children who have been abused. Over a longer time it would be possible to review the records of all children identified as having been abused and use any records from visits to the accident and emergency department to determine the predictive value of the indicators of risk.

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Cerebral and cerebellar atrophy on serial magnetic resonance imaging in an initially symptom free subject at risk of familial prion disease

N C Fox, P A Freeborough, K F Mekkaoui, J M Stevens, M N Rossor

Dementia Research Group, National Hospital for Neurology and Neurosurgery, London
WC1N 3BG
N C Fox,
research fellow
P A Freeborough,
physicist
K F Mekkaoui,
research assistant
J M Stevens,
consultant neuroradiologist
M N Rossor,
consultant neurologist
continued over

Prion diseases are transmissible neurodegenerative conditions which occur in sporadic, acquired, or inherited forms. Sporadic Creutzfeldt-Jakob disease presents as a rapidly progressive dementia with myoclonus, most patients showing characteristic pseudo-periodic complexes on electroencephalography. A new variant of Creutzfeldt-Jakob is characterised by a younger age at onset, longer survival, and non-specific initial symptoms including behavioural changes, dysaesthesias, and ataxia but without the expected electroencephalographic changes.¹ Some of these features are also found in 5-15% of all cases of the inherited forms of Creutzfeldt-Jakob disease and are associated with mutations in the prion protein gene.² We report the case of a woman with a family history of prion disease in whom progressive cerebral and cerebellar atrophy was seen when two

magnetic resonance scans were compared using registration.

Case report

A 42 year old woman from a family with histologically confirmed prion disease entered a study of symptom free subjects. She had no complaints of physical or cognitive problems and her lack of symptoms was confirmed by her family. Neurological examination and neuropsychometry gave normal results. She scored 29/30 on the mini-mental state examination. Her magnetic resonance scan was interpreted, by a neuroradiologist (JMS) blind to clinical details, as showing widening of cortical sulci, particularly those of the parietal lobes. In T2 weighted images there were no obvious abnormalities.