BAEM '92 – Silver Jubilee Conference
Free paper presentations

1.
Assessment of use of the modified "SAD PERSONS" Score in the Accident & Emergency Department
G Bryant
Accident & Emergency Department, Royal Sussex County Hospital, Brighton

Deliberate self harm is a common problem in Accident & Emergency Departments. These patients are a significant burden on psychiatric services if all are referred for psychiatric assessment. However, most patients do not require psychiatric admission or in-patient treatment. The "SAD PERSONS" score is a simple way of assessing the need for psychiatric assessment in such patients. It has been modified and its validity proven, although usually used the day after admission. In this hospital, patients who have taken relatively minor overdoses are admitted to the Short Stay Ward under the care of the A & E Consultant. The following morning they are assessed by a multi-disciplinary team. If this team feels that psychiatric assessment is necessary, this is done the same day. Since September 1991 this assessment has included use of the modified "SAD PERSONS" score, both at the time of admission and the following morning. This paper assesses the validity of this score as a predictor of need for psychiatric assessment, even at the time of admission, and it is suggested that use of the score can substantially decrease the burden on emergency psychiatric services.

2.
A trauma team in a District General Hospital - improvement with time?
G Bryant & C Perez-Avila
Accident & Emergency Department, Royal Sussex County Hospital, Brighton

In July 1988 a trauma team started operating at the Royal Sussex County Hospital in Brighton. Inevitably a few teething problems occurred. The results of audit of the first year of operation were published recently and the paper concluded that the numbers involved were too small to draw any significant conclusions. Nevertheless, the trauma team was felt to have been a significant improvement on previous practice and the team continued to operate. Several deficiencies of the trauma team were identified and improvements suggested. Since that time, organisation of the team has improved. The results of audit of the next 2 1/2 years of operation of the trauma team are presented to show what improvements in outcome have occurred.
4. HIV antibody and Hepatitis B surface antigen positivity in a group of A & E resuscitation room patients - an unlinked analysis

S Cusack, L Luke, R Evans, M Gordon, C Robertson & J Peutherer

Accident & Emergency Department, Royal Infirmary of Edinburgh, Edinburgh

The aim of this study was to detect levels of HIV antibody and Hepatitis B surface antigen positivity in patients treated in the resuscitation room of a busy teaching hospital A & E Department. Ethical approval for unlinked anonymous testing of blood samples from patients in the resuscitation room was obtained. Samples from patients presenting to and treated in the resuscitation room over a 6 month period were analysed. 830 patients presented to the resuscitation room and samples from 519 patients were analysed. 5 patients (0.9%) were positive for either HIV antibody or Hepatitis B surface antigen. No patient was positive for both. 4 of the 5 patients presented with a non surgical complaint. One of the patients positive for HIV antibody was a female aged 40 - 60 years. One patient testing positive for Hepatitis B was over 60. All patient records are currently being analysed for the 6 month period. Of the 600 patient records examined to date, 8 patients were considered to be "At risk". 6 of these were males, all were under 40 years and only 3 were non-surgical complaints. It is concluded that doctors in the resuscitation room are aware of the risk of HIV and Hepatitis B. However, this awareness appears confined to certain types of patient and conditions. The importance of judicious handling of all patients is stressed.

5. Primary care in an Accident & Emergency Department: A Senior House Officer Training Programme

J Dale, L Michell & E Glucksman

Accident & Emergency Department and General Practice & Primary Care Departments, King’s College Hospital, London

At previous BAEM conferences results have been reported of a study comparing outcomes of primary care ('general practice' type) consultations made by A & E medical staff and by general practitioners employed on a sessional basis in A & E. Senior house officer and registrar primary care consultations utilised considerably more hospital resources through investigations, referrals and prescribing than did those of general practitioners. A video study demonstrated the extent to which A & E SHOs and registrars were symptom-centred rather than patient-centred in their consultation behaviour. This paper describes a preliminary evaluation of an A & E senior house officer primary care training programme involving twice weekly seminars led by two local general practitioners. The primary care learning needs identified by SHOs at the start of their appointment, the subjects discussed during seminars and the SHOs’ evaluation will be reported. The implications of this scheme for future staff training in A & E departments will be discussed.
6. World Cup fever - Football mania

A Dancocks, A O’Cathain & A Fraser-Moodie
Accident & Emergency Department, Derbyshire Royal Infirmary, Derby

In 1990, during the screening of England’s World Cup football games, the doctors working in the A & E Department of the Derbyshire Royal Infirmary were not busy. A study was carried out to find out if this was true. England played seven games of football - a total of 12 hours. The casualty cards were studied of all patients who attended the department during these games. The patients were then grouped retrospectively into 4 Triage groups: seriously ill, less serious eg fractures, minor eg. sprained ankles, very minor eg. grazes or bruises. Age and sex were also recorded and, where possible, the duration of symptoms. The casualty cards were then retrieved for the same day of the week, one year previously (control period). The retrospective triage was done by one consultant and he did not know if he was looking at study or control cards. He did two runs of all the cards with only two differences overall. The chi-squared test was used to compare attenders in the two sets of time period. The total number of attenders during the 12 hours of football was 88, but only 121 for the control period. This is significant statistically. 26 fewer males aged 16-45 attended during the football times compared to the control times. This is statistically significant. So the fact that staff observed that fewer patients attended the A & E Department during the World Cup can be confirmed statistically. Those most likely to suffer from “football mania” were young males with very minor injuries. As watching football on television is a low risk activity, these young men would have a low incidence of injury anyway during this time. However, it is known from the duration of symptoms that most sufferers of minor injuries do not usually attend for several hours at least following their injury. So perhaps these young men endured their minor injury for the duration of the football match or came before the match. A more frequent screening of the World Cup would lead to less busy A & E Departments everywhere - but could we stand it?

7. Is there a doctor on the plane?

K Daniels
Accident & Emergency Department, Northampton General Hospital, Northampton

In 1985 almost 9 million passengers arrived by plane at Los Angeles International Airport. From these passengers there had been only 260 (0.003%) calls for in-flight medical aid. Only 20 of these (8%) had required physician attention. Seven passengers died in flight. It was concluded that high quality medical equipment was not required on board. However in 1991 concern was being expressed in the Lancet that in-flight preparedness and equipment were not what they should be, especially in view of the increasing amount of passenger air-travel and the increase in “at risk” (by age and illness) travellers. A survey of 20 well-known airlines drew a poor response but indicated a wide variation in preparedness. There are doctors and doctors and, even where medically qualified doctors are concerned, there may be reluctance (and inexperience) to become involved in in-flight incidents. A more recent account shows that most reputable airlines carry a whole range of drugs and equipment that ought to satisfy those trained in Accident & Emergency Medicine.
Facilitating data collection in trauma resuscitation

P Driscoll, M James, J Birnchy, P Dark & S McCabe
University Department of Accident & Emergency Medicine,
Hope Hospital, Salford

A limitation to trauma research is the availability of data recorded during the management of the patient. To overcome this problem a size A3 resuscitation room trauma form was designed. It incorporated the system of trauma care, described by the ATLS Course, and the standard forms for physiological recordings. To assess the effectiveness of this form a prospective study was carried out. 150 A/E recordings of trauma resuscitations, from 3 hospitals, were analysed using a standard proforma. The trauma form was then introduced and a further 75 cases analysed. There was a statistically significant improvement in the amount of information collected with the new trauma form. This applied to both demographic and clinical data. There was also a significant reduction in time necessary to retrieve the information. The reliability of the trauma form was then tested by introducing it into 2 hospitals which were not involved in the original study. 50 forms were completed and levels of demographic and clinical information were recorded which were similar to that found in the first study. We conclude that the proposed trauma form is both reliable and effective at improving the quality and quantity of information recorded during trauma resuscitation.

Can the Triage Nurse request x-rays successfully?

P Freeland
Accident & Emergency Department, St John's Hospital at Howden, West Lothian

Traditionally patients attending an A & E Department with severe trauma wait to be seen by a doctor, wait to have an x-ray performed and wait to see the doctor again. In purely time and motion terms such a system is extremely inefficient and it involves three separate waiting periods and two separate interviews with the doctor. After a short training period for the Triage Nurses, a pilot scheme was introduced in May 1989 in a District General Hospital A & E Department seeing 30,000 new patients per year, to assess whether the Triage Nurse could successfully request x-rays. All new patients attending the Department were seen by the Triage Nurse immediately after they had reported to the receptionist. If the patient fell into certain well-defined categories, the Triage Nurse could request an x-ray which would be performed while the patient waited to see the doctor. In the following two years, several studies have been carried out to audit the scheme. Prior to May 1989, 45% of all new A & E patients were x-rayed. Since the Triage Nurse started to request the x-rays this figure has reduced to 35%. In addition, it has been found that there has been a 50% reduction in time spent by the patients in the department for a wide variety of commonly seen conditions. The study has demonstrated that the Triage Nurse requests x-rays more selectively than SHOs and such a scheme produces a dramatic reduction in the time patients spend in the department.
10. Foreign body in the throat: relevance of x-rays and indirect laryngoscopy in management

V Gautam, J Phillips, H Bowmer & M Reichl
Accident & Emergency and Radiology Departments, Poole General Hospital, Poole

Between the 1st February and the 30th September 1991, 110 patients were seen in our department complaining of a foreign body in the throat thought to be due to fish, poultry, meat bones or other foods. Whilst 90% went on to have a soft tissue x-ray of the neck, only 10% had a foreign body retrieved from the oropharinx. X-ray appearance had no influence on the decision to refer the patient for ENT opinion or the likelihood of finding a foreign body. Approximately 50% of the patients had indirect laryngoscopy which revealed several causes for the symptoms. The role of x-ray and indirect laryngoscopy in the management of foreign body in the neck is discussed in the paper.

11. The earlier detection of myocardial infarction in patients presenting to the Accident & Emergency Department

W Hamer, M Gordon, T Llewellyn, S Song, D Steedman & K Fox
Accident & Emergency and Cardiology Departments, Royal Infirmary of Edinburgh, Edinburgh

The aim of this study was to assess whether serial CKMB estimation can identify acute myocardial infarction (AMI) earlier and more accurately than serial ECGs in patients with symptoms consistent with AMI but whose initial ECG is not diagnostic. A prospective analysis of patients requiring hospitalisation for exclusion of AMI was undertaken in the A & E Department, Coronary Care Unit and Medical wards of the Royal Infirmary of Edinburgh. 33 consecutive patients presenting to the A & E Department with a history of chest pain suggestive of AMI (greater than 30 minutes duration and unrelieved by GTN) but with a non-diagnostic ECG were entered into the study. Each patient was categorised into one of two different groups. Group 1 had chest pain for less than 3 hours. Routine blood was taken for laboratory CK together with blood for side room analysis of CKMB using the Hybritech Icon Assay. Three hours later these patients had a further sample drawn for side room analysis and repeat ECG. Group 2 patients had chest pain within 3-6 hours and had blood drawn for laboratory analysis of CK together with side room analysis of CKMB. The side room analysis was tested against the discharge diagnosis for each patient, together with the routine hospital laboratory assay results. Of the 33 patients recruited into the study, 27 had no ECG changes and no diagnostic increase in their CKMB, 6 patients had normal initial ECGs and a significant rise in their CKMB and in only one case did the ECG subsequently change. The sensitivity and specificity of the Hybritech ICON QSR CKMB assay is 100% whereas the sensitivity of repeat ECGs is only 20% with a specificity of 100%.
12.

Improving the care of children in an Accident & Emergency Department

G Johnson
Accident & Emergency Department, Hull Royal Infirmary, Hull

Approximately 25% of the child population attend an Accident & Emergency Department annually but many departments are unable to provide an appropriate standard of care for them. The Court report stated that "the optimum care of children in hospital requires specially designed accommodation and professional staff trained to meet their needs and the needs of their parents". The commissioning of a newly built children's area at the Accident & Emergency Department at Hull Royal Infirmary stimulated the need to address the problems related to the care of children in a busy district general hospital A & E unit. This study describes the new facilities and examines the potential benefits and problems associated with their use. The impact of the new area on the waiting times for children and adults is examined and the case mix in terms of major illness and trauma is evaluated by audit of patients seen in the paediatric resuscitation room. In particular this paper examines how far we have come towards meeting the guidelines for paediatric A & E services proposed by the Standing Committee on Accidents in Children of the British Paediatric Association in 1967.

13.

Oxygen saturation during gastric lavage

E Jones & R Brown
Accident & Emergency Department, King's College Hospital, London

Significant hypoxia has been reported to occur during upper and lower gastro intestinal endoscopy and Lambert (Unpublished data) has found transient desaturation during gastric lavage. The cause of hypoxaemia during endoscopy has been variously ascribed to the amount and nature of sedation used, bronchoeospasm induced by vagal reflex, hypoventilation and perfusion imbalance, the diameter of the endoscope and thus the physical presence in the oropharynx of a foreign body or to gastric aspiration in a semiobtunded patient. It has been recommended that supplemental oxygen should be given to all patients undergoing endoscopy. Patients undergoing therapeutic gastric lavage have many risk factors that may lead to hypoxaemia including reduced level of consciousness, the presence of drugs or food in the stomach, the effects of drugs on gastric emptying and the presence of an orogastric tube in the oropharynx. This study was designed to investigate the relationship between gastric lavage and desaturation. All adults over 16 presenting to the Accident & Emergency Department of King's College Hospital who received gastric lavage as part of overdose management were studied. An Ohmeda Biox 3700e pulse oximeter was used to monitor oxygen saturation at specific stages of the procedures from a baseline level prior to commencement through to the return to base level after completion. Oxygen saturation was also recorded during events such as struggling, retching and vomiting. The data will be analysed to assess the degree and timing of any desaturation and then relate findings to the particular stages of lavage. Results will be used to determine which, if any, patients are at risk from desaturation and to define indications for supplemental oxygen during gastric lavage in the overdose patient.
14. Risk of blood borne infection to Accident & Emergency Health Care Workers

M Lambert & J Coleman
Accident & Emergency and Virology Departments, Charing Cross Hospital, London

A number of potentially serious diseases can be transmitted to health care workers by exposure to the blood of patients. The infective agents causing most concern are Hepatitis B virus (HBV), Hepatitis C virus (HCV) and human immunodeficiency virus (HIV). The aim of the study is to determine the seroprevalence of HBV, HCV and HIV among adult A & E Department attenders and compare the results with the seroprevalence of the general population. Excess blood from 3-500 patients who require a full blood count will be studied. Samples will be stored and batch tested for HBV and HCV. Samples will then be anonymised and tested for HIV. The basic demographic data of the study population and the age/sex related seroprevalence for HBV, HCV and HIV of adult A & E attenders at Charing Cross Hospital will be presented and the implications discussed.

15. A model curriculum for Accident & Emergency Medicine

C Luke, E Kadzombe, D Gorman, A Armstrong & S Hawes
Merseyside Group of Senior Registrars in Accident & Emergency Medicine, Royal Liverpool University Hospital, Liverpool

In two recent surveys of all Consultants and Senior Registrars in Accident & Emergency Medicine in the UK, the elements of Higher Specialist Training (HST) in the specialty that were most important in influencing the education of future consultants were sought. There was minimal controversy concerning the basic clinical training involved and remarkable consensus in respect of innovative aspects eg ATLS, information technology and disaster planning. This concluding paper outlines a model curriculum for HST in A & E Medicine and compares this with existing and proposed curricula in other countries.
16. Audit of X-ray reporting facilities in U.K. hospitals

M McCabe, R Evans, J Jones & D Evans
Accident & Emergency Department, Cardiff Royal Infirmary, Cardiff

Many A & E Departments consider that A & E X-ray reporting seems to come low in the order of priorities of radiology departments. A telephone survey of all major Accident & Emergency Departments in England, Scotland and Wales was undertaken. Each Department was contacted and one of the investigators talked to a senior member of the A & E staff. A total of 243 hospitals were contacted out of 261 listed as being major A & E Units, 50 teaching hospitals, 189 District General units and 4 major paediatric units with A & E services. Routine reporting of negatives was undertaken in 226 hospitals. (A negative X-ray was defined as one in which the SHO thought there was no abnormality). In 17 units selective reporting of negatives was undertaken. Of those with routine negative reporting, consultants did the reports in 189, senior registrars in 19 and registrars in 15. The time taken to produce the reports was as follows: instant -3, up to 24 hours - 64, 24-28 hours - 57, 3-7 days - 84, 1-2 weeks - 15 and more than 2 weeks -3. The most significant finding was that 17 hospitals did not have comprehensive reporting of negative X-rays. Failure to have full reporting facilities means that a large proportion of the population do not get adequate treatment and quality control when a radiological investigation is ordered. Even in hospitals with full reporting of negatives the delays in receiving the reports may adversely affect management of the patients. In most hospitals with large A & E departments radiology reporting acts as a fail-safe mechanism. The absence of full reporting of positives can lead to two problems. Firstly, associated injuries and concomitant medical and surgical problems may be missed. Secondly, the training of radiologists may be impaired as they do not see the common fractures and dislocations. There is a need for all A & E radiographs to be reported by radiologists. This should be given a higher profile than at the present time. Reports should be available within 48 hours. Accident Departments need to match improved reporting facilities with adequate audit.

17. The Juniper Suite - a new facility for victims of rape

P Nash
Accident & Emergency Department, Hillingdon Hospital, Middlesex

Women who have been raped sometimes do not know where to seek help. Some refer to the police, others to the local hospital Accident & Emergency Department and probably many more never seek help. As part of the A & E Department rebuild at Hillingdon Hospital, we were expected to make provision for victims of sexual assault. After liaison with local police, a specially designed Rape Suite was set up in the A & E Department, funded largely by local companies. Medical and nursing staff were trained in medical, legal and forensic aspects of sexual assault. Because hospital medical staff have been trained as forensic medical examiners, they can provide initial medical assessment, including collection of forensic evidence, and co-ordinate aftercare for the victims of rape. This presentation will describe how the Suite was set up, the facilities it provides and the service given to local women since it opened in April 1991.
18. If the Reader's Digest can do it, why can't we?
J Porter
Accident & Emergency Department, Southend Hospital, Westcliff-on-Sea

When patients are asked their views on what constitutes good medical care, they emphasise the importance of being kept well informed about their illness and treatment. Conveying such information verbally is very time consuming and studies have shown that patients retain little of what they are told, so written information is of great importance. Written advice and instructions issued by A & E Departments are at best impersonal and at worst are badly presented and difficult to understand. We have therefore taken advantage of an American software package "Checkout", developed by a qualified emergency physician, which can produce individualised details for a patient discharged home of the injury, its treatment and the recommended follow-up. A PC based system with features of both a database and a word processor, the package offers total flexibility to the user to tailor instructions to local practice. It is easy to use, surprisingly fast and has proved popular with nursing staff. Initial patient views have been very favourable and a more formal study comparing the effect with our previous written advice is currently in progress. The paper will present the results of this study and demonstrate the flexibility of the system and its value in improving the quality of patient care.

19. Trauma Centres in the United Kingdom - the first year's experience
A Redmond
Accident & Emergency Department, North Staffordshire Royal Infirmary, Stoke-on-Trent

The Department of Health has financed a 3 year experiment for a trial Trauma Centre within the U.K. It is based at the North Staffordshire Royal Infirmary which forms the focal point for a series of hospitals within a Trauma System. Four A & E Consultants rotate with two Consultant Anaesthetists to provide 24 hours in-house cover. All specialities are on site. Data will be presented outlining the treatment of trauma prior to the establishment of the Trauma Centre followed by the first year's results. Particular attention will be paid to the role of individual specialities in the management of the trauma patient and to the way the roles of the various specialities unfolded throughout the first year. Problems encountered and solutions offered will be discussed. The main thrust of the North Staffordshire Trauma Centre has been to focus attention on the A & E Department and parallel studies on the impact of 24 hours cover on the general running of the A & E Department are in progress. These results will also be presented.
20.
Tetanus immunisation in the elderly population

P Reid, N Coni, A Sama, M Watters, D Brown & F McCarty
Accident & Emergency and Geriatric Departments, Addenbrookes Hospital, Cambridge

Following two cases of tetanus in elderly women in Cambridge, it was decided to investigate the immune status of elderly in the population. This study was carried out on patients attending the Accident Service and on in-patients in the Geriatric Department. A questionnaire was used to find out what could be gleaned about previous tetanus immunisation and blood tests were carried out using an elisa technique to study the levels of tetanus immunoglobulins. The study confirmed our suspicions that the elderly are poorly covered for tetanus. Their levels were also lower than that to be expected from what was known about their previous level of tetanus immunisation. This occurred even in those people who had documented evidence of their previous immunisation. From our study we concluded that the elderly are poorly covered against infection by tetanus. This is partly because their immunisation has not been complete, largely because they missed the immunisation programme targeted at children which was introduced in the 1940's and also because of the decreased response to immunisation and decreasing antibody production which have been demonstrated to occur in the elderly. This study suggests that elderly patients require special consideration in the management of wounds and burns in terms of active and passive immunisation in addition to the usual correct management of wounds. It may be that there is also a need for a more active programme of immunisation against tetanus directed to the elderly in the community, similar to those programmes directed at the prevention of influenza in the elderly and the prophylactic immunisation of children against many infections.

21.
Can the scaphoid be effectively assessed by CT scan in Plaster of Paris at 10 days after injury?

B Sinnott, N Lynch, S Hamilton & G Keye
Accident & Emergency and Radiology Departments, Meath Hospital, Dublin

This study considered twenty patients attending the A & E Department of the Meath Hospital with a history of wrist injury and a clinically fractured scaphoid. All patients were x-rayed at presentation and had a Plaster of Paris (POP) cast applied. On the 10th post injury day a CT scan was performed with the wrist still in the cast. The POP was then removed and a conventional x-ray performed. Both these studies were reported independently. The results showed no differences in the radiological diagnosis. However, the fractures were better visualised by the CT scan. The CT scan was simple and rapid to perform. It concluded that a CT scan of the suspected scaphoid fracture in POP at 10 days is all that is required. This obviates the need to remove and replace the POP for those with a positive CT scan. This reduces the time input for both physician and patients.
The Logistics of a Trauma Team

A Sivakumar
Accident & Emergency Department, St Peter’s Hospital, Chertsey

The Royal College of Surgeons report of 1988 concluded that the quality of trauma care in the U.K. is not satisfactory. The report recommended that regional trauma centres should be established to solve this problem but others have argued against this option. Many hospitals worked out their own system to look after trauma patients. St Peter’s Hospital decided to establish a Consultant-led Trauma Team to improve the care of trauma patients. The Trauma Team was established in February 1990 and this paper analyses all patients treated during the subsequent 18 months. Specific aspects considered include the usefulness of the trauma score in assessing the need to activate the Trauma Team; Trauma Team participants and how quickly they attended; the reason for any delays of members of the Trauma Team; the role played by each member of the Trauma Team; the outcome of the patients treated. The paper will consider these findings and draw some conclusions.

Audit of asthma management prior to Accident & Emergency attendance

J Thompson & M Lambert
Accident & Emergency Department, Charing Cross Hospital, London

Asthma continues to generate unacceptably high morbidity and mortality, despite advances in treatment regimes over recent years. The publication of guidelines for asthma management by the British Thoracic Society has helped to define standards of care for both acute and chronic asthma. This study aimed to compare the treatment of asthma sufferers before they present acutely to the A & E Department with the guidelines on the treatment of chronic asthma. All patients over the age of 16 years presenting to the A & E Department were interviewed regarding their recent symptoms and their current treatment, to assess if they were being treated according to these guidelines. The data from fifty patients will be presented. Initial analysis of the data suggests that the majority of patients who present to the A & E Department are receiving suboptimal care for their asthma. The implications of this for asthma management in A & E will be discussed with particular reference to those Departments seeing a high proportion of patients who do not have access to other sources of health care.