Newsletter 1999

SICS Annual Scientific Meeting 1998

The Society's seventh Annual Scientific Meeting was organised by Dr Roger Hughes with the help Dr Nigel Leary and it was held on Friday, 30th January, 1998 in the University of Stirling. Considering the quality of the speakers and the programme, the attendance was disappointing compared to the previous year. One hundred and one delegates, however, including 29 nursing staff, enjoyed a first class meeting.

Dr Ian Grant, the society's president, opened the meeting by introducing Professor Luciano Gattinoni from Milan who delivered a fascinating talk on the subject of "ECMO". He traced the changing perception of pulmonary pathophysiology in ARDS over the last 20 years and the subsequent approaches to supportive therapy. Ventilatory support strategy has gradually evolved to reduce lung damage but balancing the iatrogenic cost against benefit is a major problem especially when comparing treatments. He described the changes in entry criteria for ECMO over the years and the difference between centres. In Milan, ECMO is used when all else fails and they are treating sicker patients than previously. They are treating fewer patients but for much longer periods. Although the overall mortality associated with treatment is greater, they are not treating many who would survive without ECMO. He described the practical details and the clinical management of patients on ECMO and during the weaning process.

There were workshop sessions after coffee as at the previous year's meeting. This time there was a choice from five. These ran concurrently and were repeated for a second run, giving delegates the opportunity to attend any two of the five workshops. Dr Peter Wallace gave an update on the "New Exam and Training" in intensive care medicine. He did his best to answer the many questions with regard to the exam and what would be accredited for training. The system was in an early state of evolution, however, and many answers depended on decisions to be made by the intercollegiate board and its subcommittees. The "Case Reports" was a popular and successful workshop in which

the presenters had the privilege of questions from a critical audience, including Professor Gattinoni. The cases presented were:- "Phaeochromocytoma presenting in pregnancy" by Dr Mary Rose and Dr Carol Macmillan from Dundee; "A pressing case" by Dr Andrew Longmate from the Western General Hospital, Edinburgh; "Varicella-zoster pneumonitis" by Dr John Hunter from Aberdeen; and "A case of ARDS and HAT" (Heparin Associated Thrombocytopenia) by Dr Charlotte Gilhooly from Glasgow Royal Infirmary. Professor Bob Bartiett from Ann Arbor, Michigan, made his vast experience available in a workshop on "Research in Intensive Care". As well as giving an American perspective of research, such as that aimed at the pulmonary artery catheter controversy, he also tackled some of the ethical dilemmas, including those arising in the study of the use of ECMO in children. Sister Helen Dickie gave an "Update On TISS Working Group" with a detailed account of SOPRA (System Of Patient Related Activities) including its derivation, content and validation. It is a much more comprehensive, meaningful and useful scoring system than TISS and the pilot version was about to be launched. "Ethics And Decision Making In Intensive Care" was an interesting workshop run by Ms Frances McGeoch from the Abbey Carrick Glen Hospital, Ayr. With the help of volunteers and audience participation, she demonstrated the use of Socratic dialogue to address difficult issues.

After lunch, Dr Nigel Leary introduced Dr Peter McQuillan from Portsmouth who gave an excellent talk on "Redesign Of Acute Medical Care". He presented the findings of a pilot study which were rather worrying, seeming to show that the quality of care of severely ill patients prior to intensive care admission is frequently substandard and this has a major impact on outcome for patients, as well as the requirement for intensive care.

Recognition that the problem exists is a major hurdle. To improve the situation, he suggested, many aspects of the process would have to be looked at. Attitudes and roles may have to change. Training and maintaining standards are vital, as is the strategy for recognition and care of sick patients. Major re-organisation may be required and he outlined possible models.

Professor Bob Bartiett was introduced by Dr Cameron Howie and his talk entitled "Partial Liquid Ventilation And Other Developments" was interesting and certainly educational, as well as fascinating and entertaining. He spoke first about the multitude of treatments that have been tried in ARDS. Many of us had never heard of some of these, supersaturated oxygen solution and atrial septostomy for example. The latter is advocated for preventing death from right ventricular failure. Although ECMO is standard therapy in neonates in Ann Arbor and it is used in adults, a prospective randomised trial is in the pipeline to determine whether its use is justified in adults. It was his account of partial liquid ventilation which most of the audience found amazing. Perflubron which is a perfluorocarbon is poured into the lungs to fill the FRC, and IPPV is applied using a standard ventilator. It not only improves gas exchange, but it seems to be safe and it seems to have a beneficial effect on the acute lung injury, although an ongoing trial has not yet confirmed this.

The poster competition was judged by Professor Bob Bartlett and Mr Cari Davis (Paediatric Surgeon, Yorkhill Hospital) and the prize was awarded to Dr KarietYassen from the Royal Infirmary of Edinburgh for "Serum phosphate concentration during and after orthotopic liver transplantation".

Poster exhibits

The following is a list of the posters exhibited at the SICS Annual Scientific Meeting at Stirling University on Friday, 30th January 1998:-

The neuroendocrine and immunomodulatory effects of dopamine. Hunter JD, Noble D, Heyes SD, Eremin 0. Department of Anaesthetics and Intensive Care, and Department of Surgery, Aberdeen Royal Infirmary, Aberdeen.

TIBET..therapeutic interventions before transfer. Tan TK, Anderson L, McKinnon S, Binning A. Clinical Shock Study Group, Western Infirmary, Glasgow.

Temperature changes in patients undergoing secondary transport: a pilot study. Tan TK, Binning A. Clinical Shock Study Group, Western Infirmary, Glasgow.

Evaluation of predicted and actual length of stay in 22 Scottish ICUs using the APACHE Ill system. Woods AW, MacKirdy FN, Livingston M, Howie JC. Department of Anaesthetics, Victoria Infirmary, Glasgow.

Survey of medical admissions to ICU using a pre-admission scoring system for detecting the development of a critical illness. Egeler C, Howie JC. Department of Anaesthesia, Victoria Infirmary, Glasgow.

Pulmonary lactate production in patients with fulminant hepatic failure. Walsh TS, Hopton P, Mackenzie SJ, Lee A. Department of Anaesthetics, Intensive Care Unit and Scottish Liver Transplant Unit, Royal Infirmary, Edinburgh.

Serum phosphate concentration during and after orthotopic liver transplantation. Yassen K, Lee A. Department of Anaesthetics, Intensive Care Unit and Scottish Liver Transplant Unit, Royal Infirmary, Edinburgh.

ECG abnormalities: an investigation into ECG changes in ITU patients with acute brain injury from trauma and subarachnoid haemorrhage. Macmillan CSA, Andrews PJD, Struthers AD. Departments of Anaesthetics and Clinical Neurosciences, Western General Hospital, Edinburgh; and Clinical Pharmacology, Ninewells Hospital, Dundee.

Agreement and artifact: comparison of a miniature strain gauge transducer with an invasive pressure monitor and a water column, and its reliability in a MR scanner. Macmillan CSA, Wild JM, Marshall 1, Armitage PA, Cannon J, Easton VJ,

Wardlaw JM, Andrews PJ. Departments of Clinical Neurosciences and Medical Physics, University of Edinburgh.

MR imaging in traumatic brain injury: complimentary proton MRS and diffusion weighted imaging in intensive care patients. Macmillan CSA, Wild JM, Armitage PA, Wardlaw JM, Marshall 1, Bastin ME, Cannon J, Andrews PJ. Departments of Clinical Neurosciences and Medical Physics, University of Edinburgh.

Acute brain injury: poor outcome associated with elevated jugular bulb saturation. Macmillan CSA, Andrews PJD, Jones PA, McKeating EG, Easton VJ, Hovells T Department of Anaesthetics and Clinical Neurosciences, Western General Hospital, Edinburgh.

Displayed but not part of poster competition:-

Audit of combined renal and respiratory failure in Scottish ICUS. Scottish Intensive Care Society Audit Group.

The relationship between the presence of pulmonary artery catheters during the first 24 hours of intensive care and outcome: update. Scottish Intensive Care Society Audit Group.

A.J. Shearer

Irish and Scottish Intensive Care Societies Joint Scientific Meeting

After several years of scheming Dr Ken Lowry and Dr David Swann finally brought the Celtic intensive care societies together for a joint meeting which must surely be repeated in the future. Although the Scottish contingent was relatively small, the total attendance was about 100 and the Spires Conference Centre in Belfast provided a very apt venue for the meeting on the 11th and 12th June, 1998.

The meeting began on the Thursday afternoon with a session on the Lung. Dr Barry Kelly from The Royal Victoria Hospital in Belfast provided an education on "The Radiology Of Acute Lung Injury"; Professor Nigel Webster from Aberdeen presented the state of play and detailed practical advice on the administration of "Inhaled Nitric Oxide In The Adult ITU"; and Dr Brian Keogh from the Brompton Hospital in London presented a comprehensive review of "Ventilatory And Positional Strategies" in the management of ARDS. The "Clinical Cases" which followed stimulated lively and entertaining audience participation and demonstrated the educational value of this type of session when well conducted. Dr K. Crowley from Dublin presented a case of fatal complications following a dental abscess; Dr T. Ryan, also from Dublin, demonstrated the diagnostic problems created by systemic candidiasis after a perforated duodenal ulcer; and the session ended with a case of multiple organ failure caused by "Scarlet Fever: A Ghost From The Past" presented by Dr Carol Murdoch from Glasgow. The afternoon ended with the keynote address on "Occult Hypovolaemia And Perioperative Optimisation In High Risk Patients" by Professor Graham Ramsay, a Scottish surgeon who is director of intensive care in Maastricht. This was a succinct and interesting talk which demonstrated how earlier detection of hypoperfusion than is usually the case with current practice and earlier use of simple fluid therapy can make all the difference to the outcome.

After an enjoyable evening with dinner in the latest version of the Europa Hotel and drinks before and after in real Irish pubs such as the Crown and Robinsons, it is not surprising that not all of the delegates turned up for the breakfast workshop on the Friday morning. However, the abstemious Dr Nigel Leary had bravely agreed to discuss "Perioperative Treatment of ythe High Risk Surgical Patient: A District General Hospital Experience" and was rewarded with an appreciative, though small, audience.

The main meeting started with a free paper session which included 2 Scottish and 4 Irish papers. Dr K. Brown from the Royal Infirmary of Edinburgh presented a series of ICU patients post emergency transjugular intrahepatic portosystemicshunt (TIPSS) for variceal bleeding. Measures of liver function at presentation did not predict death but all patients who developed renal failure died. Dr Helen Galley from Aberdeen presented data which suggested that in severe sepsis the Th2 T-heiper-cell-mediated immune response predominates. This, mainly humoral response, is likely to lead to fibroblast activation and immunosuppression, and modulation of the balance of the T helper cell differentiation should be explored as a therapeutic option. Dr C. Murphy from Dublin's Mater Misericordiae Hospital had identified a 20% incidence of bacteraemia at the time of elective changes of central venous catheters in patients receiving parenteral nutrition. This bacteraemia was thought to be associated with manipulation of a previously colonised line and more than doubled the risk of sepsis in the subsequent line. Dr Philip Lockie from Queens University Belfast demonstrated that trauma patients have reduced concentration of naturally occurring antibodies to endotoxin. This is probably due to specific consumption and provides indirect evidence of endotoxaemia following major trauma. Dr B. Golden from St Vincent's Hospital Dublin produced the results for patients admitted to their ICU with meningococcal septicaemia. Treatment with protein C was not used in their unit and the results were no different to those published by another group who did use protein C therapy. Dr C. O'Malley, also from St Vincent's Hospital, demonstrated that triglyceride can be

assayed as a marker of the feed content in gastric aspirate and that using the volume of the aspirate alone as an indicator frequently underestimates the success of nasogastric feeding. The prize of £250 for the best free paper was awarded to Dr Philip Lockie.

The second half of the morning was devoted to "The Kidney" with the now famous double act of Dr Liam Plant from the Royal Infirmary of Edinburgh and Dr Keith Simpson from Glasgow Royal Infirmary. With entertainment and phenomenal clarity they explored the pathophysiology of "Selected Paradigms of Renal Disease in the ICU" and focused on an evidence-based approach to their management. They covered the epidemiology of acute renal failure and concentrated on the particular areas of ischaemic/toxic acute renal failure/ tubular necrosis, hyperkalaemia, and the place of renal biopsy.

The subject for the afternoon was "Subarachnoid Haemorrhage". Mr Mike O'Sullivan, consultant neurosurgeon, from the Western General Hospital Edinburgh set the scene with an informative talk on "Subarachnoid Haemorrhage: Past, Present and Future", covering non-surgical as well as surgical aspects of management, including coil technology for the treatment of aneurysms and the use of "triple H" therapy (i.e. hypervolaemia, haemodilution and hypertension) for vasospasm. Dr Graham Nimmo and Dr lan Grant, both also from the Western General, and Dr Rory Dwyer from Dublin brought us up to date with the intensive care management of subarachnoid haemorrhage with particular emphasis on the treatment of vasospasm and neurogenic pulmonary oedema.

There were 1 0 posters exhibited at the meeting:- 5 from Dublin, 2 from Belfast, and 1 each from Aberdeen, Glasgow and Carlisle. The prize for the best was split between:-

Closed tracheal suction in ICU: Its effects on delivered tidal volume and forced expiratory lung volume. McCarroll C, Lavery G, Coogan T. Royal Hospitals Trust, Belfast, and,

An audit of the outcome for combined renal and respiratory failure in Scottish ICUS. Noble JSC, MacKirdy FN, Donaidson SI, Howie JC. Victoria Infirmary, Glasgow.

A.J. Shearer

Transport of the critically ill in Scotland

Following the meeting held in the Western Infirmary in June 1997, reported in last year's newsletter, the Society in conjunction with the Scottish Ambulance Service began the development of a series of courses on the Transport of the Critically Ill. As these courses were aimed at a wide range of staff involved in this area, it was decided to develop them in a form analogous to the ATLS, with a series of relatively fixed lectures which could be delivered in various parts of the country.

The course development team came from a range of backgrounds (ambulance, anaesthetics, accident and emergency, paediatrics, and nursing) but all had active experience in this area:-

Mr Andrew Marsden Scottish Ambulance Service

Dr Philip Booth Paediatrics, Aberdeen

Dr Louie Plenderieith Anaesthetics, Glasgow

Dr Philip Korsah Shock Team, Glasgow

Dr Susan Midgely Anaesthetics, Edinburgh

Mr John Hiscox A & E, Aberdeen

Dr Anne Blyth Anaesthetics, London

Mr Graham Percival Nursing, Edinburgh

Dr George Smith Anaesthetics, Aberdeen

Ms Laura Johnstone Nursing, Aberdeen

After much discussion, the agreed format was:-

An introduction from the Ambulance Service on the facilities available for transport, including land ambulances, fixed wing aircraft and helicopters, with their benefits and problems; lectures on physiology and equipment; a demonstration of various transport trolleys and the equipment carried in a front line ambulance; lectures on the problems of transferring the critically ill patient, the critically injured patient (including burns and neurotrauma) and the critically ill neonate and child; and case presentations illustrating the problems which could be encountered.

The first set of lectures has been given throughout the year at the Scottish Ambulance Headquarters in Peebles, Aberdeen Royal Infirmary and the Kelvin Conference Centre in Glasgow. There was almost a maximum attendance at each and they were well received. Participants came from a wide range of backgrounds including ambulance personnel, nurses, trainee and consultant medical staff, as well as general practitioners in isolated areas. Feedback was obtained from all the courses and this has enabled us to continually improve the course over the year.

It is intended to continue this course next year as well as developing new courses. The Civil Aviation Authority requires both a pilot and another person with sufficient training in aircraft safety on a passenger carrying flight. It is therefore planned to develop a course which covers both aircraft safety and the patient aspects of air transfer in more detail than the above course.

J.L. Plenderleith

Intensive Care Medicine Course

The only one of the three planned courses to take place in 1998 was held in Aberdeen on 28th and 29th September. That course, which was the first of these in Aberdeen, was held in the Postgraduate Centre at Foresterhill and was directed by myself. My direction was distinguished mainly by an incredible and probably unbearable neurosis prior to the course starting. However, this concern was quite needless thanks to the support and advice of David Swann and the high standard of instruction and enthusiasm of all the instructors.

There were 17 participants and, as has been a feature of previous courses, they ranged from SHO to consultant. The programme followed the now familiar pattern of a mixture of lectures, workshops and symposia. A wide range of topics were covered such as nutrition, cardiovascular support, ethical issues, poisoning, burns and smoke inhalation.

Feedback from the participants was excellent. It was presented both informally, at a local bistro taken over for the night by most of the candidates and instructors, and formally by written evaluation at the end of the course. We look forward to hosting another course in Aberdeen sometime in the future.

R. Patey

Annual Audit Meeting

The Society's 4th Annual Audit Meeting was held on Friday 30th October 1998 at the Education & Conference Centre, Stirling Royal Infirmary. Despite a clash with 2 other relevant meetings, attendance was the best yet.

At the 1997 SICS Audit Meeting, it was suggested that a new diagnostic classification could be adopted across Scotland to improve the inadequacies of the current 'APACHE' classification to describe case-mix in relation to hospital coding. To this end, a group, including Gillian Adey, Cameron Howie, John Kinsella, Simon Mackenzie, Fiona MacKirdy and Louie Plenderleith, has been considering ways of improving the situation. Simon Mackenzie gave the first presentation of the day, outlining the proposal the group has reached. The proposal is that we record, in addition to the APACHE diagnostic categories: 1) the reason for ICU admission, as one of a) the primary diagnosis, b) nature of surgical procedure itself, c) unexpected complication of surgery/treatment, or d) multiple organ support; and 2) multiple diagnoses from a standard list. Such a list would be accessed in a hierarchical would be accessed in a hierarchical manner on Ward Watcher.

Louie Plenderleith described a significant problem within all available scoring systems, which derives from poor uniformity of fit of the model across major diagnostic and admission categories. This is exemplified in APACHE 11 where postoperative patients have a significantly lower SMR than those admitted from the ward. He elegantly demonstrated that the apparently substantial variation in SMRs between individual ICUs in Scotland could arise purely as a function of their case mix. Although he did this for APACHE Ill we are aware this problem exists in all of the scoring systems. To date we have dealt with this problem by showing separate SMR tables for operative and non-operative patients. We are aware that the best way to deal with this problem is to customise the available models to remove, or significantly reduce, the variations in performance across the major categories of diagnosis and source. This was dealt with in the subsequent presentation by Fiona MacKirdy.

Fiona first of all demonstrated the importance of having an adequate patient volume available when assessing relative performance by individual ICUs using the SMR. An important message from this PowerPoint presentation was the extent to which relative performance varies year-on-year. Very few ICUs demonstrated consistent rank order performance across the 3-year period. In one case this was explicable by unusual case mix. Thus the Western General Hospital (Edinburgh), which takes a large number of patients with a neurological diagnosis, had a consistently poor rank order performance. Fiona was able to demonstrate that this was due to the high SMR associated with neurological conditions. Work by Simon Mackenzie, utilising the GCS score available prior to ICU admission where scoring is precluded by concurrent sedation, has previously demonstrated correction of this deficiency. Fiona went on to demonstrate SMRs from a customised scoring method based on APACHE 11 physiology and APACHE Ill diagnoses, which Mark Livingston has developed. This method shows much better uniformity of fit. Consequently, there is less variation in ICU performance and the Western General in particular, zips from one end of the league table into the top 25%.

Assessment of ICU length of stay against an expected ICU length of stay could be used as a measure of quality of care. A prediction of ICU length of stay had been developed by APACHE Medical Systems Inc. as part of the APACHE III severity of illness scoring system. Dr Andrew Woods, SpR in Anaesthetics, presented analysis of this predictive tool. His evaluation demonstrated a satisfactory

correlation when patients are grouped by predicted duration of stay. However, there is an overall overestimation of length of ICU stay in the Scottish ICUS. This APACHE Ill-based model is not in the public domain. Consequently, rather than trying to customise this model, we intend to attempt to develop our own model based on similar information. To this end, further work is ongoing with Mr John Norrie, Senior Statistician at the Robertson Centre for Biostatistics at the University of Glasgow.

At the 1997 Annual Meeting, Colin Selby presented data on ICU admissions with acute asthma set against the background of total asthma admissions to Scottish hospitals during the same time period. This demonstrated a mortality rate, somewhat higher than would have been predicted by the severity of illness scores. Following demonstration of a higher mortality than predicted in our asthma patients, a casenote review was instituted by Dr Martin Hughes, SpR in Anaesthetics. His presentation was based on an initial review of the 'asthma' deaths previously reported. He demonstrated that the problem lay in placing COAD-type patients in the asthma diagnostic category. Of the 13 deaths, only 3 were acute asthma, 2 of which suffered out of hospital cardiac arrests. Martin proposes to undertake case-note review of all patients classified as asthma to determine the true mortality rate for this condition. As part of this presentation he presented a literature review which demonstrated a clear improvement in outcome for this condition in recent years. He conjectured this might be related to differences in ventilator strategies which minimise barotrauma.

The next presentation by Keith Simpson was once again a follow-up to a presentation given by Stephen Noble at last year's meeting. While Keith opened his presentation by emphasising the limited role which he has taken in this study his subsequent presentation left no one in any doubt as to why he had been invited to speak. Three clear messages were apparent from this presentation. First of all data entry errors, in this case involving TISS, have the capacity to deliver quite spurious information on outcome. Secondly, outcome for patients requiring renal and respiratory support within Scotland compares favourably with published studies and shows minimal variation in spite of considerable differences in dialysis activity. Lastly, the unique opportunity offered by collaboration between two national databases, ourselves and the Scottish Renal Registry & Audit System, has allowed us to demonstrate the very low rate of chronic renal support required in such patients unless there is evidence of previous chronic renal impairment. This work has relied considerably on the data validation performed by Sandra Donaldson who will resign her current part-time post at the end of this year.

After some technical hitches and an unscheduled break for lunch, the Peter Andrews 'team' demonstrated the ultimate in automatic cardiovascular and ICP data collection which he proposes to use to audit the relationship between variations in management, cardiovascular instability and ultimate outcome across the four centres which take neurosurgical admissions.

Making a Frank Sinatra comeback, Fiona reviewed the temporal variations in ICU workload across the Scottish ICUs as a whole and thereafter went on to examine inter-unit variations in bed occupancy, length of stay and rate of active intervention. This work forms the basis for any ICU needs assessment as it includes information which can be used to assess the extent to which pressure on ICU beds can be relieved by increasing HDU capacity. This served as an introduction to the subsequent presentations by Stan Murray (ably assisted by John McFarlane) who reviewed ICU bed needs in Glasgow and the assessment of HDU bed requirement in Ninewells presented by Professor lain Ledingham. The work from Glasgow relied on a combination of our own audit data and an episodic assessment of ICU refusals. The HDU assessment involved a comprehensive survey of inpatients to assess the proportion who met HDU criteria set by the DOH Guidelines. The number of HDU beds calculated from this assessment was lower than that which had been previously suggested and is broadly in line with the ratio of ICU:HDU beds which can be derived from surveys

performed within GGHB i.e., approximately 1:2. The relevance of this area of work relates to discussions we have had with the Scottish Office on re-focussing the audit to deliver information on the relationship between HDU and ICU bed provision and the impact of ICU refusals. This latter issue was reviewed with remarkable clarity and brevity by Malcolm Booth.

An enticing presentation of our sister organisation's intentions for future development in England & Wales, given by Dr Kathy Rowan, highlighted the opportunities that will increasingly arise for co-operation between us. This was well received by all except John Kinsella as he had to suffer presentation of the four studies which have been short-listed for funding to study aspects of pulmonary artery catheter use and outcome. We want to make it quite clear that rumours of Scottish paranoia are groundless. However, we remain perplexed that our track record in this area was insufficient to allow our research proposal to reach the short list.

Brian Millar, who has been a regular participant in our Audit Meetings, outlined the future software developments which are anticipated. These involve establishment of the Bed Bureau in Glasgow by the turn of the year and, after a one year appraisal of its functionality, the option of extending it to the West of Scotland and the rest of the Scottish hinterland. Connectivity of the system with both ICU monitoring and laboratory equipment, and with the hospital PAS system is anticipated as a natural development.

Things do not always go as planned to paraphrase Robert Burns. On this occasion an outstanding contribution by Dr Howie required to be omitted due to the constraints of time (or completely inadequate planning, depending which way you look at it). This should have allowed discussion of the options which exist for future funding and clinical emphasis of the Audit.

F.N. MacKirdy & J.C. Howie

South-East Scotland ITU Group

The SESITU Group has had another full and productive year.

The group encompasses all consultant clinicians working in adult and paediatric intensive care in this part of the world, namely:- Borders General Hospital, Melrose; Queen Margaret Hospital, Dunfermline; Royal Infirmary of Edinburgh; St John's Hospital at Livingston; the Sick Kids, Edinburgh; and the Western General Hospital, Edinburgh. We have also seen a growth in the number of interested trainees attending (which is very welcome). Our meetings rotate round all the different hospitals and, on the whole, have been very well attended.

Nineteen ninety eight was kicked off by the Western team who put on a combined presentation with the neurosurgeons on the old chestnut of Subarachnoid Haemorrhage. Dr Carol Macmillan, ITU fellow, also presented her work on MR in Acute Brain Injury. Both presentations were very well received. The Sick Kids team presented on the topic of lntra Medullary Fluid Resuscitation, amongst other things. St John's presented an interesting case of acute renal failure which was followed by Dr Liam Plant's (Consultant Nephrologist, RIE) excellent Consideration of the Management of Acute Renal Failure. The Borders team presented 4 cases of The HELLP Syndrome/ or Was It Pre-eclampsia?/ or Was It SLE?/ or Was It ITP? The Fife team presented a case of atypical pneumonia which turned out to be a herpetic pneumonitis but, initially, had the team foxed by a false positive TB result. This led to an interesting and practical discussion on the dangers of bronchoscope contamination. Finally, the RIE team put on a double bill in the form of two debates on the subjects

of This House Believes in the Use of Albumin and This House Believes in the Use of Nitric Oxide with, as can be imagined, lively debates ensuing.

The new office bearers of the group were also announced at this meeting:-

President - Dr Patrick Armstrong, St John's Hospital, Livingston

Secretary - Dr Alistair Lee, Royal Infirmary of Edinburgh

Treasurer - Dr Alasdair Mackenzie, Queen Margaret Hospital, Dunfermline

M. Fried

Glasgow and West of Scotland Intensive Care Society

In the first meeting of the session Dr Richard Griffiths of Whiston Hospital, Liverpool addressed the society on aspects of nutritional support in the critically ill patient with particular emphasis on the use of Glutamine and other immuno-enhancing preparations. This was particularly well received by the large multidisciplinary audience.

Future meetings arranged include the usual registrar's presentation evening and a proposed meeting on the Albumin controversy. Dates are yet to be confirmed.

It is hoped that a proposal based on needs assessment will bring an extra 4 ICU beds overall to Glasgow. There remains uncertainty as to the distribution of beds within the city, pending trust reconfiguration.

The Committee for this year is:-

Dr Jim Dougall, Chairman

Dr Alan Davidson, Secretary

Dr Malcolm Booth, Treasurer

Dr Roger White

Dr Angus McKee

The society would like to extend a welcome to individuals of all disciplines involved in the care of the critically ill.

J.R. Dougall & J.A. Davidson

Consultant sessions in intensive care in Scotland

A survey of predicted requirement over the next five years:

Early in 1998 the SICS Council attempted to estimate the number of consultant sessions in Intensive Care Medicine likely to become available over the next five years. A questionnaire was sent to all units on the SICS database. Twenty-six units were contacted and all responded. The main responses were:-

Number of ICU beds:

3 beds - 2 units; 4 beds - 9 units; 5 beds - 6 units; 6 beds - 2 units; >6 beds - 7 units

Number of consultants with ICU sessions:

5 consultants - 16 units; 6 consultants - 4 units; >6 consultants - 6 units, including 2 smaller units where the ICU cover is shared with theatre cover

Number of ICU consultant sessions:

The vast majority of units had 10 daytime sessions per week. These were mainly dedicated to the ICU but in a few instances were shared with other cover, e.g. emergency theatre. Some larger units had >10 daytime sessions and specific out of hours sessions.

In the NEXT FIVE YEARS there are likely to be:

1) An increase in the number of ICU Consultant sessions:

7 units planned to increase the number of consultant posts or the number of sessions for the existing consultants. This amounted to a planned increase of up to 20 sessions.

2) ICU consultant retirements: 8 retirements (mainly 2 sessions each) = total of 16 sessions

3) ICU consultants considering relinquishing ICU sessions: Up to 10 consultants may relinquish their sessions. Again this was mainly 2 each, giving a further 20 sessions.

There are therefore a definite 16 sessions becoming available due to retirements. Planned expansion will possibly generate a further 20 sessions, while consultants considering relinquishing ICU commitment may lead to a further 20 sessions.

Most consultants at present work 2 fixed ICU sessions per week (plus on call), although this pattern may change with the advent of specialist trained intensivists. On the basis of the present average of 2 ICU sessions per consultant, a bare minimum of 8 consultants would be required over the next 5 years, but the best estimate may be up to 28, working a total of 56 sessions.

At present there are only 6 trainees on Intensive Care Medicine specialist registrar training programmes in Scotland, each of 2 years duration. This would generate 15 trained intensivists over 5 years. To fill available ICU sessions these individuals would need to work up to 4 daytime sessions per week each. However, it is more likely that a mixture of specialist intensivists and consultant anaesthetists with ICU interest will be appointed, working between 2 and 4 daytime sessions per week each.

Many thanks to all units. More detailed results are available from the SICS council.

A.F Mackenzie & L.S. Grant

The President

It has been another year of progress for the Society. We have been involved in running courses in collaboration with the Scottish Ambulance Service (Transport of the Critically 111), and with the Royal College of Physicians and Surgeons of Glasgow (MRCS), as well as continuing to run Intensive Care Courses, most recently in Aberdeen. There has been a suggestion that we should organise a study day to provide updates for consultants. If this is to be undertaken, we would expect to cast our net for speakers outwith Scotland.

It is anticipated that the Scottish Parliament will take a keen interest in Health. It is therefore important that Intensive Care creates clear lines of communication to provide appropriate advice. While it might be preferable for Intensive Care to be represented in its own right, I do not believe such an option will be on offer. 1 have therefore had preliminary discussions with the Standing Committee of the Royal College of Anaesthetists in Scotland to identify the best means by which this can be organised and, in addition, we have been invited by the Scottish Society of Anaesthetists to send a representative to their council meetings. We will, as at present, retain direct communications with the Scottish Office, as we have a national database which is a unique source of information. At this time it is not clear how the amalgamation of trusts and the Acute Services Review's "big idea" of clinical networks will impact on the delivery of acute medicine. It is crucial that this society succeeds in placing Intensive Care at the heart of the debate. To do this, our lines of communication and our control of information will be crucial.

At the time of writing, the national audit has had funding extended from December 1998 till the end of March 1999 to allow consideration of a further submission for funding a commissioned project for a period of approximately 2 years. It has been emphasised that, while there is great satisfaction with the current audit, more of the same will not be sufficient to attract ongoing funding. We have demonstrated that there is not a problem with intensive care! Consequently, while we will continue to collect information on severity of illness, there will be less emphasis on overall clinical performance and greater emphasis on attempting to examine outcomes in discrete patient groups. This we have already done for patients having prolonged periods of intensive care, and those requiring combined renal and respiratory support. At present we are in discussion with Zeneca to support a study of patients who develop ARDS. We will attempt to provide more information on the impact of discrete processes in Intensive Care. This could involve simple randomisation in selected hospitals where there was no clear-cut evidence or preference for a specific choice of therapeutic intervention (e.g. nutritional additives thought to improve immune competence). Outcomes would be mortality, corrected for severity of illness and ICU and hospital length of stay as currently collected. We hope to be able to provide benchmarking of ICU length of stay as a result of work currently being done with Mr John Norrie at the Robertson Centre in Glasgow University. We are also examining the extent to which we can develop more meaningful diagnostic categories, document the impact of ICU refusals, model ICU need in discrete areas, and contribute to the assessment of HDU need.

One of the most satisfying consequences of our expanding commitments is that all members of council become involved. And on the subject of involvement and commitment-The 1999 AGM will see the retirement of Ian Grant from formal council membership, though he may continue to be involved in an advisory role, as he remains a council member of the ICS. Ian has made a unique contribution to the development of the society, culminating in his period as President. When will we see his like again? I'm trying Ian, but you're a hard act to follow.

J.C. Howie