

1ST ANNUAL REPORT OF DR. S.N. BOLSIN
CONSULTANT ANAESTHETIST, BRI AND BEH.

The purpose of this report is to critically review my first year in post, quantifying the workload achieved, noting areas of improved service and significant progress and identifying clinical or research priorities for the future.

The domestic background of this first annual report includes settling into a new home in Bristol with significant redecoration and improvement and also the birth of our second child in April.

<u>Clinical Workload</u>	Adult	Paediatric
<u>Anaesthesia for Cardiac Surgery</u>	107	57
<u>Anaesthesia for Ophthalmic Surgery</u>	73	54
<u>Anaesthesia for Dental Surgery</u>	112	38
<u>Anaesthesia for Minor General Surgery</u>	7	

Anaesthesia for Cardiac Surgery

This specialty forms the bulk of the clinical workload and all of the on-call commitment. The paediatric workload in this specialty is emphasised by the 35% caseload. My confidence in this sub-group of patients has grown considerably during the year but I have much to learn especially in ICU management. Perioperative mortality in this group is higher (10.7%) than the adults (3.8%) but this is to be expected. My clinical priority in this area is to improve the perioperative management

of children and I feel that I should pay more attention to details of heat losses in theatre, acidosis and inotrope requirement in small children to improve my clinical service.

The adult mortality is acceptable but should be addressed, and the current audit of clinical practice in cardiac anaesthesia and surgery may well establish the underlying severity of disease in the population operated on in this region. For both paediatric and adult work, the surgeons and anaesthetists must establish mandatory convenient morbidity and mortality meetings to fulfil both training and audit requirements, and I look forward to the speedy introduction of such meetings.

The gross neurological damage rate in the adult cases is 3.8% but many small postop deficits may be missed on the ITU in the first 24 hours. I see this as an area in which closer collaboration between the anaesthetists and perfusionists is vital and I intend to make my patients the subject of intensive neurological audit when the Cerebral Function Analysing Monitor is available here.

Anaesthesia for Ophthalmic Surgery

Mr. Grey's lists have provided a welcome respite from the cardiac service and an enjoyable clinical challenge. There has been a 43% paediatric workload and of the adults 25% are aged 65 years and over. Open discussion of difficult patients prior to surgery has made the initiation of medical treatment and planning of elective anaesthesia and surgery much simpler and has led to few cancellations for anaesthetic reasons alone. Preoperative investigation of such patients has usually been good. Communication remains the best avenue to a smooth clinical service in this specialty.

Anaesthesia for Dental Surgery

Mr. Ross's list of Day Case Dental Surgery has presented few problems but the occasional inpatient cardiac case has ensured that standards of both anaesthetic room and operating theatre monitoring are maintained. The 25% children anaesthetised ensures variety and provides few problems in the total of 150 patients.

My greatest concern in this list is the standard of the anaesthetic assistance which must be of a minimum trained standard in a "shared airway" setting. Should the standard lapse, cancellations would result.

Anaesthesia for Minor General Surgery

A second day case list occurring on a monthly basis has provided the greatest clinical frustration so far. Experience in Australia and America has shown that day case surgery is an obvious area of expansion in a cost-efficient health service. To be undertaken safely, efficiently and cost effectively requires adherence to certain minimum criteria for patient selection, surgical expertise and postoperative care. Unfortunately, this has not always been appreciated by surgical colleagues and I have tolerated some laxity. This will not continue and cancellations may result from poor patient and surgical selection in future.

AUDIT

This has been confined to cardiac surgery entirely. I have been able to introduce a system of clinical audit of all adult cardiac surgical patients which attempts to relate a preoperative score of acute physiology and chronic health to postoperative morbidity and mortality. These are

assessed crudely by time to extubation, time on ICU and date of discharge. The data collection and return are now operating well in practice and the system is making use of the cardiac surgical computer for storage and later analysis. I think it is very important that this system is retained for reasons of clinical analysis, anaesthetic (surgical) training and research, and I intend to review the results periodically as a guide to standards of practice. The cornerstones of the project are that every adult is entered onto the pink audit form and that the data are reliably collected and stored. This requires awareness of the process by juniors and communications with me or the other consultants in cases of confusion.

RESEARCH

The appointment of Chris Monk to the cardiac department galvanised the research side and I have been very happy to assist Chris and Alex Manara with the Alfentanil/Propofol infusion study. My clinical impression is that this a haemodynamically very stable anaesthetic and eminently suitable to aortic valve surgery as well as coronary artery grafts. I look forward to submitting patients with low ejection functions to the Enoximone trial which Chris has devised and hope that the results will bear out my clinical impression that Enoximone is a useful adjunct to achieve extra inotropic effect in the severely failing left ventricle. The vasodilation effect must also be quantified.

After preliminary work at the Charing Cross Hospital, I hope to be able to establish a clinical facility to assess renal blood flow on both Level 4 and Level 5 ICUs. The cardiac surgical patients represent an ideal source of information on the effect of vasoactive infusions on renal blood flow. The ultrasound technology on site should be capable of accurately recording

the information for analysis. The seminar I have organised for September 19th is aimed principally at the very practical end of achieving reliable measurements at the BRI where cardiac patients would be an obvious source of data. My intention would be to study the commonly used Dopamine doses, followed by or at the same time as submitting patients for trials of Dobutamine doses, adrenaline doses, with and without GTN, and then newer inotropes such as Dopexamine and Enoximone. I realise that this is a lot of work but I feel that once the facility for assessment of renal blood flow has been set up the data collection will become more routine than experimental and will require close clinical co-operation with cardiac surgical, medical physics and nursing colleagues.

The promised arrival of the CFAM will allow me to undertake research in my special interest, and recent information has convinced me that optimising the frequency distribution of the EEG during CPB can reduce neurological and psychometric deficits postoperatively. I intend that the CFAM when in clinical use will also generate small clinical research projects for junior cardiac anaesthetists.

CARDIAC INTENSIVE CARE

In this year, Sally Masey's idea of a weekly period of ICU rostering of the trainee anaesthetists has proved popular with everyone concerned and I support the change. At the same time the three junior cardiac consultant anaesthetists have instituted a daily 10.30 a.m. ward round at which as many anaesthetists as possible attend. This round has taken on a useful teaching function for junior and senior medical and nursing staff and has helped to co-ordinate plans for the management of patients staying longer than 24 hours on ICU. I see the ward round as a considerable achievement

in the first year and hope that it will continue to provide a daily forum for the exchange of medical and nursing views on patient management. More recently, anaesthetists have been offered time after the weekly cardiac surgical consultants Grand Rounds to offer advice or suggestions for the management of long-stay patients. This, too, must be a constructive step forward. I am sure that as a trained intensivist with experience in Australia, my ITU knowledge is not fully utilised to benefit the cardiac patients.

ADMINISTRATION

I have undertaken few administrative tasks for the specialty or the Division and I am in the process of learning how the administrative machinery at the BRI impinges on my clinical responsibilities. I hope to continue this learning phase to achieve clinical benefits for the Division.

TEACHING

1. Juniors.

This has been of a semi-formal nature in the clinical setting of operating lists and intensive care ward rounds. The latter are invaluable in the practical teaching of the specialty of cardiac anaesthesia.

I have supervised registrar presentations on Friday mornings and have been impressed by the commitment of the juniors to this forum.

2. Nursing Staff

Initially the theatre anaesthetic staff and more recently the ICU nurses have requested semi-formal teaching in the clinical setting. I have always tried to provide ad hoc teaching of nursing staff when time permits, but I am now wholly convinced of the value of this type of nurse education to the continued training, morale and smooth running of a cardiac intensive care.

3. Medical Students

I have taught medical students in cardiac theatre and hope they have learned some basic information in this setting. I have also supervised a tutorial for medical students on cardiac anaesthesia. I am told that the slides for this talk are out-of-date and I will undertake to prepare a new set with the other interested cardiac anaesthetists.