BJA
British Journal of Anaesthesia

Volume 116, Number 4, April 2016

British Journal of Anaesthesia **116** (4): 441–3 (2016)
doi:10.1093/bja/aew051

EDITORIALS

Alastair A Spence C.B.E. 1936–2015

A Man For All Seasons

G. Smith[1] and J. M. Hunter[2,*]

[1] Emeritus Professor of Anaesthesia, University of Leicester, UK, and
[2] Emeritus Professor of Anaesthesia, University of Liverpool, UK

*Corresponding author. E-mail: bja@liverpool.ac.uk

Emeritus Professor Alastair Spence, the sixth Editor of the *British Journal of Anaesthesia* (*BJA*) and a past President of The Royal College of Anaesthetists (RCoA) died in November 2015. In 1972, he followed in the footsteps of the esteemed Dr J Edmund Riding, the fifth Editor of the *BJA*, who subsequently became Dean of the Faculty of Anaesthetists of the Royal College of Surgeons of England (RCSEng).

Alastair Spence was an outstanding contributor of his generation to our speciality. He possessed exceptional attributes which enabled him to exert a significant impact on many aspects of the practice of anaesthesia at local, national and international levels. He was shrewd and politically astute, yet sociable, witty and approachable. He possessed the ability to deliver lectures with a spontaneity and ease which belied a formidable intelligence and in-depth knowledge of the relevant literature. His ability as a public speaker also made him an obvious choice to deliver the after-dinner toast. Many generations of trainees will be grateful for the personal interest he took in their career development and the limitless amount of time devoted to requests for help and advice. At a personal level, he was always friendly, generous and, with reliance on the excellent culinary expertise of his wife Maureen, extremely hospitable.

After graduating in medicine from the University of Glasgow and completion of anaesthetic training at the Western Infirmary, Spence spent one year as an MRC Research Fellow in the Hyperbaric Unit in the Department of Surgery at the Western Infirmary (1965–66). This was followed by a two-year Steinberg Research Fellowship in the academic department at Leeds headed by Professor John Nunn, when the department was at its zenith; here he encountered others who were destined for academic eminence including Prys-Roberts, Ellis, and Kelman. During this period, he developed an interest in postoperative pain and published a seminal study on the use of thoracic epidural analgesia for pain relief after upper abdominal surgery. This paper is still one of the *BJA* top 50 citation classics.

In 1969, Spence returned to Glasgow as the head of department and senior lecturer in the academic department of anaesthesia established at the Western Infirmary. In this post, he continued with his interests in postoperative pulmonary function and supervised a series of research fellows who measured FRC, closing volumes, and oxygenation after upper abdominal surgery. He also developed an interest in potential health hazards to theatre personnel resulting from exposure to the operating theatre environment. In association with Robin Knill-Jones, he conducted large scale national studies which appeared to support the growing view at the time that pollution of the operating theatre with waste anaesthetic gases was responsible for such problems as an increased incidence of spontaneous abortion. This led to a large prospective MRC supported study in the UK undertaken by Spence and Knill-Jones. The eventual consensus was that the earlier retrospective studies from several international centres had exaggerated the extent of any health hazards. In 1976, Spence was promoted to Reader and in 1980 to a full Professorship in the University of Glasgow.

One criterion in judging the success of an academic head of department is the development of potential successors. Despite being assisted by only one other permanent academic at the Western Infirmary, both his first and second senior lecturers were appointed to chairs elsewhere in the UK - Smith to Leicester in 1979 and Nimmo to Sheffield in 1984. Two anaesthetic trainees who started their research careers in Spence's department and to whom he gave personal guidance and inspiration were also to

© The Author 2015, 2016. Published by Oxford University Press on behalf of the British Journal of Anaesthesia. All rights reserved.
For Permissions, please email: journals.permissions@oup.com

Downloaded from http://bja.oxfordjournals.org/ by John Vogel on April 10, 2016

take up professorial appointments in the UK in due course: Aitkenhead in Nottingham and Reilly in Sheffield university.

In 1984, when his academic talents had become well recognized, Spence was recruited to the chair of anaesthesia in the University of Edinburgh after the retirement of Professor J D Robertson. Here, he continued with his interests in postoperative pain and pulmonary function and he supervised studies on the toxicity of nitrous oxide. His epidemiological interests and natural collaborative instincts led him to establish and chair a Consensus group with the RCSEng which resulted in publication of 'Pain after Surgery'. This was a highly influential report both in the UK and worldwide which led to routine audit of postoperative pain and the eventual establishment of acute pain teams to improve the quality of postoperative management.

One area in which his impact was particularly outstanding was his service to the *BJA*. After returning to Glasgow in 1969, Spence was elected as a member of the Editorial Board at a very young age. Shortly afterwards he was appointed Editor of the Journal, and he occupied a full term of office from 1972 to 1982. As Editor and a junior member of the Board, he was responsible for continuing to produce a high quality journal of predominantly clinical papers along the lines established by his predecessors, but he also introduced significant innovations. He expanded the process of peer review extensively, initiating the international assessment process in place today. Experts from a broader range of other specialities were also recruited more frequently as peer reviewers.

Since the Journal was founded in 1923, it had been published by Sherratt, a family-run business in Manchester under an arrangement in which the Board did not carry any financial risks but was provided only with sufficient funds for Editorial expenses. Against opposition from some senior members of the Board, who felt considerable loyalty to Sheratt as they had protected the journal through the severe stringencies of the Second World War, Spence and other younger members persuaded the Board to agree to a change in publishers to MacMillan. This was a tribute to his political skill and insight into the extensive advantages offered by a large international publishing house to the future development of the journal. By this time, the journal had achieved charitable status as a company limited by guarantee.

It would be difficult to overestimate the significance of these changes. They resulted in the Board receiving funding which extended the breadth of its activities in ways which would impact on anaesthesia throughout the UK. For example, it allowed Spence in the 1980s to introduce the first national anaesthetic writing workshops. As these were extremely popular and more funds became available, he arranged a *BJA* symposium on writing and publishing papers at the 1988 World Congress of Anaesthesiology in Washington, USA; this was so well received that it has been emulated by many anaesthetic organizations. Eventually, the *BJA* writing and research workshops were absorbed into the annual educational programme of the RCoA. In addition, the *BJA* became a significant source of research funding in the UK, at one time the largest in anaesthesia. Since 2012, these funds have been administered by the National Institute of Academic Anaesthesia based at the RCoA. Furthermore, the improved financial state of the Journal provided expenses to allow recruitment of internationally recognized authorities onto the Board, initially from the USA and now worldwide. With the increase in numbers of papers submitted, several of these individuals have also become editors.

After completing his term of office as Editor, Spence became the Chairman of the Board of the *BJA* in 1983 until 1992 when he became President of the College of Anaesthetists. Whilst the Editorship remained in Glasgow during Fitch's tenure (1982–1987), he negotiated another change of publishers from MacMillan to PSP, the publishing division of the BMA. This link with the *BMJ* and its Editor Richard Smith led to the Editor of the *BJA* being the only anaesthetist invited to join the Committee on Publication Ethics (COPE), established at a time of increasing concern over plagiarism and outright fraud in the conduct of research. Whilst Chairman, Spence was a great source of help and inspiration to a totally new Editorial team during the transition of the office from Glasgow to Leicester during Smith's period as Editor (1987–1997). During this decade, there was a large increase in the number of manuscripts submitted and the journal doubled in size so that by 1997 it was no longer possible for a single editor to oversee every manuscript. Hence Smith's successor, Hunter, was appointed as an Editor-in-Chief (EIC) with a team of four editors. The Journal's healthy financial state permitted another significant change from paper-based record keeping to electronic tracking of manuscripts at this time: a move which Hunter, as EIC from 1997 to 2005, completed in transforming the Journal to full electronic submission, review, editing and printing.

Spence was also involved with the major national anaesthetic bodies in the UK. He was a member of Council of the AAGBI from 1976 to 1979 and was elected in 1983 to the Board of the Faculty of Anaesthetists of the RCSEng when there was prolonged debate on the creation of a separate College of Anaesthetists; eventually the Faculty became a College within the RCSEng in 1988. Unfortunately, this arrangement would not permit the granting of a Royal Charter and the Faculty was divided into those members who wished to remain within the RCSEng and those who believed that its destiny lay elsewhere. Spence played a major role in seeking out 48/49 Russell Square as the first home of the new College and overseeing the move out of the RCSEng. The first President of the College was Professor Michael Rosen (1988–1991) with Spence as Vice-President. These men were instrumental in enrolling the *BJA* as the official journal of the College in 1990.

The purchase of premises at 48/49 Russell Square was made possible partly by a substantial loan from the *BJA* arising from accumulation of the funds which began two decades earlier with the change in publishers. Spence succeeded Rosen as President in 1991 and subsequently became the first President of The Royal College of Anaesthetists in 1992 when the Royal Charter was granted. He was privileged to welcome HM Queen Elizabeth II to the Royal College when she officially opened the building in 1993.

As President, his major focus was on the training of anaesthetists (as a member of the Chief Medical Officer's working group), interdisciplinary training in intensive care, training and staffing in intensive care and continuing medical education (CME). An example of his progressive ideas and foresight lie in the fact that whilst on the Board of the *BJA*, he had argued that the journal should publish articles on CME separate from the erudite postgraduate reviews which had always been a feature. However, it was not until 2001 that this proposal finally took flight in the form of *Continuing Education in Anaesthesia, Critical Care and Pain* (*CEACCP*). This bimonthly publication edited by Rowbotham was designed to provide CME for consultants but it was so successful that it rapidly became reading for the FRCA examination. In 2016 it metamorphosed into the monthly *BJA Education*.

Despite his considerable achievements at every level, Spence was a modest man who never made personal claims for success. He was aware that in complex areas such as medicine, significant progress is usually the result of team effort. He thrived in this type of environment as he possessed the personal skills and breadth of vision to catalyse significant innovations and advances in anaesthesia. He was always excellent company and an endless source of amusing anecdotes which he frequently

Downloaded from http://bja.oxfordjournals.org/ by John Vogel on April 10, 2016

delivered with a mischievous grin. He will be mourned by Maureen to whom he was married for 52 years, and also by his two sons and two grandchildren. He will be remembered with affection and gratitude by all his friends and colleagues not only in the UK but also worldwide.

Graham Smith
Editor BJA 1987-1997
Jennifer M Hunter
Editor-in-Chief BJA 1997-2005

British Journal of Anaesthesia **116** (4): 443–7 (2016)
doi:10.1093/bja/aew049

Perioperative management of diabetes and the emerging role of anaesthetists as perioperative physicians

N. Levy[1,*], N. Penfold[1] and M. Mythen[2,3]

[1] Department of Anaesthesia, West Suffolk NHS Foundation Trust, Hardwick Lane, Bury St Edmunds, Suffolk, UK,
[2] Department of Anaesthesia, University College London, London, UK, and
[3] University College London Hospitals Biomedical Research Centre, London, UK

*Corresponding author. E-mail: nicholas.levy@wsh.nhs.uk

Diabetes is the most common metabolic disorder and affects about 6–7% of the population and about 16% of the inpatient population.[1 2] Diabetes leads to accelerated atherosclerosis and patients are at higher risk of renal impairment, coronary vascular disease, peripheral vascular disease and cerebro-vascular disease. Subsequently, the surgical patient with diabetes is at higher risk of perioperative morbidity and mortality and subsequently longer length of hospital stays.[3–13] The reasons for this excess morbidity and mortality is multifactorial and includes increased risks of Hypoglycaemia and hyperglycaemia,[3–15] infective complications (both surgical site infections (SSIs) and systemic infections),[3–13] medical complications including acute kidney injury (AKI), acute coronary syndromes (ACS) and acute cerebro-vascular events,[3–13] hospital acquired diabetic ketoacidosis (DKA),[2 16] use of variable rate i.v. insulin infusion (VRIII),[2 14] misuse of insulin,[17 18] complex polypharmacy[2 14] and multiple co-morbidities including microvascular and macrovascular complications of the diabetes.[4 5]

On the basis of these concerns, NHS Diabetes commissioned the Joint British Diabetes Societies (JBDS) to produce guidance to optimise the management of the surgical patient with diabetes with the explicit aim of reducing the incidence of hypoglycaemia and hyperglycaemia, the risk of medical and infective complications, the risk of insulin and VRIII related harm and reducing the excess length of stay.[5]

The JBDS proposed the concept of the comprehensive care pathway for the management of the surgical patient with diabetes and utilised the enhanced recovery programme's concept of a multi-disciplinary pathway starting with the general practitioner (GP) and finishing at discharge (Fig. 1).[5] When the guidelines were first published in 2011 there were no prospective studies on which to base recommendations. It was necessary to reflect on current practice and reject policies that were clearly associated with harm. The main recommendations of the JBDS recommendations were:

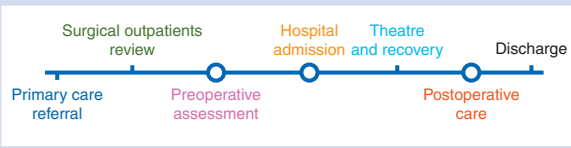

Fig 1 Comprehensive Care pathway for the elective surgical patient with diabetes.

- Promote day surgery and day of surgery admission when and where possible. This was based on the simple premise that if a patient is not in hospital it is less likely for iatrogenic harm to occur. It was also recognised that there was a widespread regional variation of care. Whilst some hospitals actively encouraged the elective surgical patient with diabetes to be managed in day surgery units (DSU), and managed these patients very well, many DSUs actively discouraged day surgery for any patient with diabetes.[19 20]
- Promote self-medication, if possible, as many patients are often more knowledgeable than ward medical and nursing staff about their own medical conditions, and have a vested interest to self -medicate properly.[21]
- Avoid the use of sliding scales/VRIII when and where possible, and that modification of the patient's usual diabetes medication was preferable. This modification should be agreed in the PAU clinic.
- Indications for the use of the VRIII include poor glycaemic control and anticipated prolonged starvation (defined as missing more than two meals).
- Every hospital should have guidelines to promote the safe use of the VRIII.
- To prevent iatrogenic hyponatraemia and hypokalaemia,[22] the maintenance fluid whilst on a VRIII should be 5% glucose

Downloaded from http://bja.oxfordjournals.org/ by John Vogel on April 10, 2016