Graham Smith
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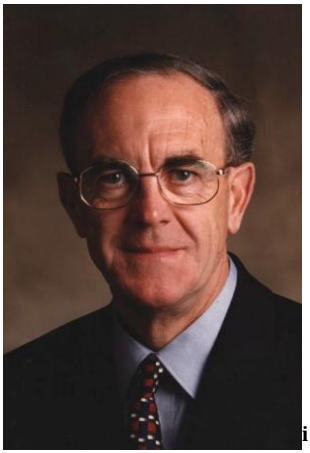

Graham Smith studied medicine as an undergraduate at Guy's Hospital Medical School, in the University of London, where an intercalated Hons BSc course in physiology lead to the early development of an interest in academic medicine. After qualifying in 1966, he commenced training in anaesthesia in Leeds where he fell under the influence of the Academic Department of Anaesthesia headed at that time by Professor John Nunn.[i]

Whilst studying for the FFARCS examination, he found time to assist Alastair Spence in a study of post-operative thoracic epidural analgesia on pulmonary function[1]. Before the results of the final FFARCS examination were announced he secured the post of Research Fellow with Iain Ledingham in the Hyperbaric Oxygen Unit based in the University Department of Surgery headed by Sir Andrew Watt Kay at the Western Infirmary in Glasgow. Here, studies on pulmonary oxygen toxicity were accumulated to provide sufficient material to submit for an MD thesis.

After one year in this post he was appointed as Lecturer/Hon. Senior Registrar in the University Department of Anaesthesia headed by Alastair Spence at the Western Infirmary, Glasgow.

In 1971 he spent a year on an MRC Travelling Fellowship in the Department of Anesthesiology headed by John Bonica, at the University of Washington, Seattle. Studies on pulmonary oxygen toxicity with Peter Winter demonstrated that the speed of onset of toxicity in a model of lung damage was a function of both high PaO_2 and P_AO_2. In addition, he was a junior member of a team, which included Ted Eger and Tom Hornbein that was the first to demonstrate experimentally in volunteer divers that the MAC value of nitrous oxide was the same as that predicted theoretically from the Meyer-Overton theory.

[i] This chapter was co-authored with David Rait, his friend and colleague.

At that time in the USA, it was generally regarded as essential to administer a small dose of d-tubocurarine prior to suxamethonium in patients at risk of aspiration because the raised intragastric pressure caused by fasciculations increased the tendency to regurgitation. As this seemed illogical, on returning to Glasgow in 1972, Graham Smith set about examining the effect of suxamethonium on lower oesophageal sphincter (LOS) pressure in healthy patients undergoing elective surgery. He demonstrated that barrier pressure was indeed raised during the period of fasciculations and was lowest during the period of flaccid paralysis in comparison with the baseline awake values. This lead to a large series of studies on the effects of drugs used in the perioperative period on the LOS. Many NHS senior trainees seconded to the academic departments in both Glasgow and Leicester were involved, see section below on oesophageal studies.

In 1974, he was promoted to Senior Lecturer/Hon. Consultant at the Western Infirmary in Glasgow where he remained until 1979. During these five years he worked with Iain Ledingham, Jim Parrot (a pharmacologist from the University of Strathclyde) and two consultant anaesthetists, John Vance and John Thorburn on studies of experimentally induced myocardial ischaemia.

University of Leicester

The medical school in Leicester opened for students in 1976 and Graham Smith was appointed as Foundation Chair of the Academic Department of Anaesthesia in 1979. In designing the new department, he recognised that in addition to the teaching and research responsibilities common to all medical school departments, anaesthesia could offer a unique opportunity to demonstrate some important aspects of applied physiology and pharmacology to the medical students. Their anaesthetic attachments concentrated on the perioperative management of surgical patients, including pain management and some practical skills. These proved to be very popular amongst the Leicester students.

Research

During his years in the Glasgow Department and in Seattle, he had published numerous papers on basic physiology and pharmacology. Many of these dealt with the effects of oxygen and hyperoxia on the lung and cardiovascular system and these studies lead to several editorials and seminal articles on oxygen toxicity.

At Leicester, his initial goals were three:

i. Postoperative **pain control** was, and is, a fertile ground for anaesthetic research. Smith instigated many studies of analgesic drugs, their effects on physiology and patient outcomes and also various methods of administration.

ii. Following on from his research on the cardiovascular system in Glasgow, he obtained a high-pressure gas chromatograph for the department. This allowed further studies to be made of the **sympatho-adrenal response to surgical stress** and the methods of reducing it.

iii. Study of the **lower oesophageal sphincter** and the effects of various drugs upon it aimed to reduce morbidity caused by regurgitation, particularly in obstetric anaesthesia. Many studies were carried out using direct pressure measurements made simultaneously within the oesophagus and the stomach. This research led to studies on gastric emptying and the effect upon it of starvation and a variety of drugs used in anaesthesia. A generation of volunteer registrars became familiar with Campbells Consomme soup (the control 'stomach content') and improved their CVs in the process.

To support him in these endeavours, Smith was supported by several senior lecturers, four of whom went on to occupy chairs: Alan Aitkenhead became chair in Nottingham, David Rowbotham succeeded him at Leicester, David Lambert occupies the Chair of Anaesthetic Pharmacology at Leicester and Paul Watson is Professor of Pain Management and Rehabilitation at Leicester.

i. Analgesia/pain

There are 73 publications relating to 'pain' or 'analgesia'; obviously a major interest.

Extradural / epidural

The first publication [1] was an abstract of a presentation to the Anaesthetic Research Society (ARS) meeting in Newcastle-upon-Tyne July 13th 1968. The report was a 'work-in-progress' and the aim was to assess the part played by wound pain in post-operative hypoxaemia. Randomisation threw up an unexpected allocation of patients, all cholecystectomy patients were in one group and it became..."clear that the patients for cholecystectomy behaved differently

from the others and must be considered separately". The observations were that " The extradural patients, who had complete pain relief and freedom to cough in the first 48 hours after operation, were restored to their pre-operative level of arterial oxygenation by day five whereas their control group had significant residual hypoxaemia." They also felt that the improvement in postoperative vital capacity was a function of factors in addition to pain relief and that gas under the diaphragm may play a more important role than was realized at that time.
A full publication in 1971 [2] reported on twenty-one patients allocated randomly to postoperative analgesia with either morphine by injection or continuous extradural nerve block. It concluded that the conventional use of narcotics for postoperative analgesia increased the risk of lung morbidity.

An overview by Buggy and Smith in 1999 [3] suggested that, with the balance of available evidence, epidural anaesthesia and postoperative analgesia may facilitate earlier recovery by reducing the incidence of thromboembolic, pulmonary, and gastrointestinal complications after major surgery. It did take meta-analysis to indicate these favourable outcomes.

Slow release morphine [4-16]

There was a decade between this early work on postoperative analgesia with extradural (epidural) local anaesthesia and opiates and the work on controlled/ slow release morphine. Smith's publications range from 1982 – 1989. There were three papers on the comparison of slow release morphine vs. intramuscular morphine [4, 10, 12] and a set of papers on slow-release morphine suppositories [5, 6, 8, 15].

[As an aside the terms extradural analgesia/epidural analgesia separate in frequency in use in, about, 1955; 'extradural analgesia' peaks in 1988.

In contrast, slow release morphine appeared in 1978 and peaked in 1994 but at a much lower frequency. Should the correct term be inter-, or intradural?]

The '82 paper with Fell and Chmielewsk [4] reported on fifty patients in a trial of either intramuscular morphine or controlled-release morphine sulphate tablets orally. Both were acceptable to the patients. Interestingly, there was more sedation in those patients undergoing hysterectomy who received morphine sulphate tablets.

From this they moved on to rectal sustained release morphine [5] and there was a cluster of similar publications between 1982-1989; Derbyshire appears to be a consistent co-author [6-8, 10-13, 15-17].

In the 1985 paper by Derbyshire et al. there was a more conservative result. MST (a slow release formulation) and i.m. morphine provided satisfactory postoperative analgesia, but significantly greater amounts of supplementary i.m. morphine were required in the MST group. However, there were more adverse effects reported by the patients in the i.m. morphine group. The mean serum morphine concentration in 12 patients in the MST group was 1.7 ng ml^{-1} at 08.00 h and 19.5 ng ml^{-1} at 16.00 h on the 1st day after operation this suggested that gastric emptying was impaired. The authors thought that further work was necessary before any recommendations could be made regarding the routine use of MST.

The last paper authored by Lew [16] reported that of 12 patients three had delayed gastric emptying and impaired morphine absorption in the immediate postoperative period and later there was a significant reduction in eight patients. This effect on gastric emptying seemed to be the death knell for the use of oral sustained release morphine formulations for postoperative pain.

Local anaesthesia

New methods of using local anaesthetic agents for the management of postoperative pain were also investigated; this was late in the publishing portfolio...1997-2004.

The first in 1997 (Williamson et al.) [18] was a preliminary randomized study where 50 ml of saline solution containing lignocaine 200 mg and adrenaline 1:500,000 were instilled into the peritoneal cavity after total abdominal hysterectomy. Pain scores at rest were significantly lower (otherwise there was no difference) at 24 and 48 h compared with the saline group. A year later Ali et al. made it clear, "Intraperitoneal bupivacaine or lidocaine does not provide analgesia after total abdominal hysterectomy" [19]. After a series of papers between 2002-

2004 [20-24] Ng et al. concluded that "Intraperitoneal administration of levobupivacaine with epinephrine is associated with modest analgesia following laparoscopic cholecystectomy"[24]; another technique that has not survived.

Tissue infiltration with local anaesthetic agents has a long history, two Leicester investigations added to the documentation - first "Effect of infiltration with ropivacaine on blood loss during reduction mammoplasty" [25], (there was greater blood loss with ropivacaine than bupivacaine) and the infiltration of the abdominal wall with local anaesthetic after total abdominal hysterectomy [26]. It had no opioid-sparing effect. Could any improved immediate postoperative analgesia be overwhelmed by the following 48h of data (when the local anesthesia had worn off) – or was this an attempt to demonstrate a possible pre-emptive analgesic effect? Certainly, surgeons still infiltrate such wounds.

The same failure of efficacy was demonstrated with transcervical local anaesthesia for laparoscopic sterilizations [27, 28].

Palliators

The use of the Cardiff Palliator was first described in 1976[ii]. The Leicester department started publishing on this topic in 1982 [29-33]. In 1985 the Leicester Micropalliator was described by Derbyshire et al. and in 1987 he and Vickers AP et al. reported on a comparison of it and the Cardiff Palliator. The Leicester Micropalliator delivered a mandatory background infusion in addition to the on demand bolus doses of morphine. The Cardiff Palliator gave only bolus doses of morphine. It was considered that the Leicester Micropalliator's provision of analgesia was equivalent or superior without an increase in side effects. The total dose of morphine did not differ significantly.

ii. Catecholamines

In 1982 Fell et al [34] published "Plasma catecholamines in anaesthesia" and in 1984 Derbyshire and Smith [35] wrote a review on 'Sympathoadrenal responses to anaesthesia and surgery'. For five years (1986-1991), studies were carried measuring catecholamines. The high-pressure gas chromatograph had obviously arrived!

[ii] Evans,.J M, et al, Anaesthesia, 1976, 31, 847 and Evans, J M, et al, Lancet, 1976, 1, 17

The first paper [36] assessed the concentrations of adrenaline following infiltration of local anaesthetic with adrenaline 1:200,000 for rhinoplasty and brachial plexus block. There was a much greater increase in the adrenaline concentration in the rhinoplasty group. It was concluded that the 'safe dose of adrenaline' was meaningless unless the site of administration is specified.
In 1987 "Sympathoadrenal responses to tracheal intubation after thiopentone or propofol" [37], "Effects of alfentanil on the pressor and catecholamine responses to tracheal intubation" [38], "Sympathoadrenal responses to tracheal intubation after thiopentone or propofol" [39] and "Cardiovascular and catecholamine responses to laryngoscopy with and without tracheal intubation"[40], a busy year. There were others on this topic...[41-43]...practolol did not ameliorate the response, halothane did.

It would appear that topical anaesthesia of the mucosa of the upper airway is ineffective in reducing the pressor and catecholamine responses to laryngoscopy. It does not seem to be current (2013) practice and has not been so for twenty years (personal observation).

Intravenous lignocaine prior to intubation was also studied [43]... 1.5 mg/kg, Mean arterial pressure did not increase in patients given lignocaine but in the placebo group it increased by 19.1%.

A variety of papers on the topic of catecholamine concentrations were subsequently published for a variety of situations [44-49], including respiratory therapy, naloxone and endovascular aortic aneurysm repair.

iii. Lower oesophageal sphincter studies

There are seventeen studies from 1978 – 1991[50-66]. They systematically assess the effects of many agents used in anaesthesia on the lower oesophageal sphincter (LOS); atropine, metoclopramide, glycopyrrolate, diazepam, beta-blockers, pancuronium, atracurium, vecuronium, neostigmine, edrophonium, domperidone and finally, posture – the Trendelenburg[iii] position (steep head-down tilt).

As an example [61], the simultaneous administration of atropine and neostigmine were studied in healthy patients. Atropine 1.2 mg and neostigmine 2.5 mg were given together at the termination of surgery and for the following 15-20 minutes measurements of lower oesophageal sphincter pressure were made. This

[iii] Friedrich Trendelenburg was a German surgeon (1844–1924).

combination of drugs resulted in transient but significant decrease in LOS pressure.

Studies of the Trendelenburg position, a position that would intuitively suggest an increased risk of regurgitation, were reported in 1990 and 1991by Heijke et al. The 1991 paper [64] described how measurements were made of gastric, lower oesophageal and barrier pressures in the supine, moderate and steep Trendelenburg positions. The Trendelenburg position resulted in no significant changes and it was concluded that the steep Trendelenburg position did not increase the risk of regurgitation.

There are three general articles on the subject [67-69], the last, in 2003. It is about gastric reflux and pulmonary aspiration; the factors which contribute to the likelihood of aspiration and methods to minimise it.

Hyperbaric and oxygen studies

There were three investigative papers from 1970-72, one on the haemodynamic and myocardial effects of hyperbaric oxygen in dogs subjected to haemorrhage (Cardiovasc. Res. [70]), one on the effects of hyperoxia on airways resistance (J. Appl. Physiol. [71]) and one on the effects on the cardiovascular system (Br. J. Anaes. [72]).

1. In the first, anaesthetized dogs were subjected to moderate and severe haemorrhage and the administration of oxygen at 2 Ata failed to modify the cardiac changes that result from blood loss; myocardial blood flow was decreased and myocardial oxygen availability was not improved.
2. After breathing 100% oxygen at 2 Ata for five hours there was a 30% increase in airways resistance and a 25% increase in thoracic gas volume. There were no significant changes with the air equivalent.
3. The hyperoxia/cardiovascular system paper showed that, in dogs, 100% oxygen at 2 atmospheres for 8 hours caused a fall in cardiac output of approximately 30% within 4 hours with a 70% increase in systemic vascular resistance and a rise in left ventricular end-diastolic pressure. There was a rapid restoration of all parameters towards the initial values when an air equivalent was given. It would appear myocardial oxygen toxicity is reversible in this time frame.

The effect of 100% oxygen during anaesthesia was also studied. Patients with a fracture of the neck of the femur were anaesthetized by three different techniques, (halothane in oxygen, halothane with 66% nitrous oxide breathing spontaneously, and artificial ventilation with 66% nitrous oxide in oxygen). There was a small decrease in PaO_2 60 min after anaesthesia but there was no significant

difference between the groups. The main message from this study was that there was no significant absorption collapse in the 100% oxygen group [73].

Three other, hyperbaric, papers are of interest - hyperbaric nitrous oxide anaesthesia in man: determination of anaesthetic potency (MAC) and cardiorespiratory effects [74, 75], the MAC of N_2O was determined to be 1.04 atm ± 0.10 (SE) and "The performance of anaesthetic equipment under hyperbaric conditions. Performance Characteristics of Anaesthetic and Related Equipment", this was an overview article in International Anesthesiology Clinics [76].

Nitrous oxide.

Apart from the hyperbaric work on nitrous oxide, Smith et al. also studied nitrous oxide during anaesthesia and its effect on postoperative pulmonary function. Arterial blood-gases and lung volumes were measured before and after upper abdominal surgery, they found no significant difference between patients ventilated with oxygen and nitrogen and a group receiving oxygen and nitrous oxide [93] .

They also determined the threshold concentration of nitrous oxide that affected psychomotor performance using audiovisual reaction times. A positive effect was found at a concentration of between 8 and 12% nitrous oxide [94].

A study into the effect of nitrous oxide on the cardiovascular system and coronary circulation of the dog showed that there was a significant decrease in cardiac output, increases in right atrial and left ventricular end-diastolic pressure and systemic vascular resistance. However there was no significant change in mean coronary artery flow, coronary vascular resistance or myocardial oxygen consumption [95].

Ischaemia

For ten years Smith was involved in investigations on myocardial blood flow in a canine model. The investigation started whilst he was in Glasgow (first publication in 1973) and the last publication (1982) when he was in Leicester. In chronological order, 'they' studied the effect of halothane, propanidid, hypocapnia, methohexitone, halothane-induced hypotension and hypocapnia, hypoxia, hypercapnia and hypoxaemia, ketamine, sodium nitroprusside-induced hypotension, enflurane and thiopentone; a huge array of work. For six Smith was the principal author, JP Vance for another six.

The halothane study [96] was presented at an Edinburgh ARS meeting. The dogs were exposed to 0.5%, 1% and 1.5% halothane for 30-min periods. Blood

flow was measured using using xenon-133. There was a dose-dependent reduction in myocardial blood flow in proportion to the decrease in cardiac output and myocardial oxygen consumption. Higher doses of halothane produced an increase in myocardial vascular resistance, myocardial oxygen extraction; causing a fall in coronary sinus PO_2.

Propanidid [97] produced a large but transient increase in myocardial oxygen availability in the dog. Myocardial blood flow rose considerably independent of any change in perfusion pressure, cardiac output or myocardial oxygen consumption. The stabilizing agent Cremophor-EL was found to have no effect.

In the hypocapnia study [98] ($PaCO_2$ about 25mmHg) there was a highly significant reduction in myocardial blood flow and oxygen availability but myocardial oxygen extraction increased so that oxygen consumption was unaffected.

Methohexitone caused a reduction in myocardial blood flow, oxygen availability and consumption but no change in myocardial oxygen extraction [99].
Halothane and hypotension [100] - mean arterial pressure was reduced with 1-1.5% halothane, myocardial blood-flow and oxygen consumption decreased and myocardial vascular resistance increased. With added hypocapnia myocardial blood-flow was further decreased.

Ketamine [101] - caused a decrease in arterial pressure and an increase in cardiac output, coronary blood flow and myocardial oxygen consumption; there was no change in myocardial oxygen extraction.

All these investigations are of importance in the understanding of the effects of common occurrences during anaesthesia – however they are of greater importance to those patients with ischaemic heart disease. Three studies in the '80s addressed this situation.

In 1980 "Halothane improves the balance of oxygen supply to demand in acute experimental myocardial ischaemia" [102], and in 1982 myocardial ischaemia was induced in dogs by ligation of the anterior descending branch of the left main coronary artery and were given thiopentone [103]. The oxygen availability/consumption ratio did not change significantly.

A similar study using Enflurane [104] produced a significantly smaller reduction in blood flow in the ischaemic than in the non-ischaemic areas. It was suggested that the improvement in the oxygen availability/consumption ratio was due to a decrease in heart rate and, as they said, "the beneficial effects of

anaesthesia in acute myocardial ischaemia are probably secondary to changes in systemic and myocardial haemodynamics and not a result of specific mechanisms." There were other publications in this series [105-112].

Anxiety

Two publications are of particular interest. "Measurement of plasma catecholamine concentrations. An assessment of anxiety" and Anxiety levels in junior anaesthetists during early training [113, 114].

The first study assessed plasma catecholamine concentrations following venous cannulation, there were no changes in the following two hours, In a second study surgical patients were asked to rate their anxiety on a linear analogue scale immediately before premedication and immediately before induction of anaesthesia. No significant changes in anxiety or plasma noradrenaline concentrations followed premedication but there was a mean 40% percent increase in plasma adrenaline concentration before induction of anaesthesia. A correlation (r=0.32) was demonstrated between the Linear Analogue Anxiety Score and mean percentage change in plasma adrenaline concentrations.

A year later the predisposition to anxiety and personality profiles were recorded in four novice anaesthetists before training started and at the transition to solo practice. There was no difference in anxiety scores as a result of 'going solo' in any subject. This, in the author's opinion, is either due to the excellent preparation of the novice anaesthetists or the possibility that the novices didn't know what they didn't know (!); probably the former.

Teaching

Whilst supporting and guiding the many individuals who passed through his department during his 27 years in Leicester, Graham Smith also developed many overseas links. He was External Examination Advisor to the Universities of West Indies, Calgary, Hong Kong, Singapore and Seattle and was Visiting Professor at the Universities of Sydney and Hirosaki, Japan.

In 1996 he was elected to the Senate of the European Academy. He became a Member of the Council of the Association of Anaesthetists of Great Britain and Ireland from 1983-1987 and of the Council of the Royal College of Anaesthetists from 1991-2003. He was Senior Vice-President from 2000–2002.
He examined for the FRCA and at home and abroad examined in MB ChB, MD, PhD, and MMed degree examinations.

The British Journal of Anaesthesia

Graham Smith enjoyed a long association with the British Journal of Anaesthesia (BJA). In 1973, the Journal Office moved from Liverpool to Glasgow when Alastair Spence assumed the Editorship after J Edmund Riding. Graham Smith became an Assistant to the Editor and from 1979 to 1987 he was ~~slow~~ Postgraduate Editor responsible for producing two issues per year of review articles devoted to a single theme.

In 1987 he was appointed Editor and the Journal Office transferred from Glasgow to Leicester. Significant changes occurred during his tenure as Editor from 1987-1997, including a transition in 1991 from manual handling of manuscript data on index cards to computerised tracking on a computer database. This paved the way for electronic editing and subsequent submission and printing. In 1992 the BJA became the official journal of the Royal College of Anaesthetists, and over the period 1987-1997, the number of manuscripts submitted to the journal increased threefold and the circulation doubled in size.

By 1997, the editorial workload was such that it was no longer possible for a sole Editor to oversee every manuscript, as all previous eight editors had since the founding of the journal in 1923. Consequently, Graham Smith's successor, Jennie Hunter, was appointed in 1997 as an Editor-in-Chief with a team of four full editors. In 1998, he became the chairman of the Board of the BJA, a post he occupied until 2004. During this period, there was progressive expansion in the international membership of the Board. In addition, the commercial success of the Journal (the foundation of which could be traced back to the change of publishers originated by Alastair Spence in 1973) allowed it to become a significant financial supporter of research in anaesthesia, intensive care and pain medicine.

Publications

Graham Smith's name appears on over 300 peer reviewed publications and he produced two major anaesthetic textbooks. With Alan Aitkenhead, he produced the 'Textbook of Anaesthesia' (Churchill Livingstone) now in its 5th edition and the most popular textbook for trainees in their first two years. With Walter Nimmo he produced 'Anaesthesia', a two volume comprehensive text used widely.

Reflecting on his career in the specialty, he said that the most enjoyable part of it was the association with the British Journal of Anaesthesia. The biggest challenge was to found and develop an academic department in Leicester from

scratch. The department became one of the largest in the country and contributed more ARS (Anaesthetic Research Society) presentations than most others.
Graham Smith, and his department, has produced a large body of research work on important topics...there are more publications listed below than have been reviewed for this overview.

References

1. Spence, A.A., G. Smith, and R. Harris, *The influence of continous extradural analgesia on lung function in the postoperative period.* British Journal of Anaesthesia, 1968. **40**(10): p. 801-2.
2. Spence, A.A. and G. Smith, *Postoperative analgesia and lung function: a comparison of morphine with extradural block.* Br J Anaesth, 1971. **43**: p. 144-148. .
3. Buggy, D.J. and G. Smith, *Epidural anaesthesia and analgesia: better outcome after major surgery?. Growing evidence suggests so.* BMJ, 1999. **319**(7209): p. 530-1.
4. Fell, D., A. Chmielewski, and G. Smith, *Postoperative analgesia with controlled-release morphine sulphate: comparison with intramuscular morphine.* British Medical Journal Clinical Research Ed., 1982. **285**(6335): p. 92-4.
5. Hanning, C.D., et al., *Rectal administration of morphine from a sustained release hydrogel suppository.* Br J Anaesth 1983. **55**: p. 236-237
6. Graham, N.B., et al. *Hydrogel pessaries for the rectal delivery of morphine*. in *10th International Symposium on controlled release of bioactive materials*. 1983
7. Derbyshire, D.R., et al., *Non-parenteral postoperative analgesia. A comparison of sublingual buprenorphine and morphine sulphate (slow release) tablets.* Anaesthesia, 1984. **39**(4): p. 324-8.
8. Hanning, C.D., et al., *Further development of a sustained release morphine suppository.* Br J Anaesth, 1984. **56**: p. 802.
9. Vater, M., et al., *Pharmacokinetics and analgesic effect of slow-release oral morphine sulphate in volunteers.* British Journal of Anaesthesia, 1984. **56**(8): p. 821-7.

10. Derbyshire, D.R., et al., *Morphine sulphate slow release. Comparison with i.m. morphine for postoperative analgesia.* British Journal of Anaesthesia, 1985. **57**(9): p. 858-65.
11. Derbyshire, D.R., C.A. Pinnock, and G. Smith, *Sustained release morphine for postoperative analgesia.* Anaesthesia, 1985. **40**: p. 1234.
12. Pinnock, C.A., et al., *Comparison of oral slow release morphine (MST) with intramuscular morphine for premedication.* Anaesthesia, 1985. **40**(11): p. 1082-5.
13. Derbyshire, D.R. and G. Smith, *Observations on the use of sustained release morphine tablet for postoperative analgesia*, in *Advances in the Management of Chronic Pain*, P.R. Bond, J.H. Stewart, and R.T. Towson, Editors. 1986, Purdue Frederick: Toronto. p. 113-118.
14. Pinnock, C.A., et al., *Absorption of controlled release morphine sulphate in the immediate postoperative period.* Br J Anaesth, 1986. **58**: p. 868-871.
15. Hanning, C.D., et al., *The morphine hydrogel suppository. A new sustained release rectal preparation.* British Journal of Anaesthesia, 1988. **61**(2): p. 221-7.
16. Lew, J.K.L., et al., *Postoperative absorption of controlled-release morphine sulphate. A study in patients given no parenteral opioids* Anaesthesia, 1989. **44**: p. 101-103
17. Aitkenhead, A., C.A. Pinnock, and G. Smith, *Pharmacokinetics of two preparations of slow-release oral morphine sulfate in volunteers.* Anesthesiology Review, 1988. **15**: p. 31-33
18. Williamson, K.M., B.R. Cotton, and G. Smith, *Intraperitoneal lignocaine for pain relief after total abdominal hysterectomy.* British Journal of Anaesthesia, 1997. **78**(6): p. 675-7.
19. Ali, P.B., et al., *Intraperitoneal bupivacaine or lidocaine does not provide analgesia after total abdominal hysterectomy.* British Journal of Anaesthesia, 1998. **80**(2): p. 245-7.
20. Ng, A. and G. Smith, *I: Intraperitoneal administration of analgesia: is this practice of any utility?* British Journal of Anaesthesia, 2002. **89**(4): p. 535-7.
21. Ng, A., et al., *The analgesic effects of intraperitoneal and incisional bupivacaine with epinephrine after total abdominal hysterectomy.* Anesthesia & Analgesia, 2002. **95**(1): p. 158-62.

22. Ng, A., et al., *Intraperitoneal and incisional bupivacaine with epinephrine for analgesia following total abdominal hysterectomy.* Br J Anaesth, 2002. **88**: p. 326P
23. Ng, A., et al., *Intraperitoneal levobupivacaine with epinephrine after laparoscopic cholecystectomy.* Br J Anaesth, 2003. **90**(6): p. 820P
24. Ng, A., et al., *Is intraperitoneal levobupivacaine with epinephrine useful for analgesia following laparoscopic cholecystectomy? A randomized controlled trial.* European Journal of Anaesthesiology, 2004. **21**(8): p. 653-7.
25. Liddle, A.M., et al., *Effect of infiltration with ropivacaine on blood loss during reduction mammoplasty.* Br J Anaesth, 1998. **81**: p. 974-975.
26. Klein, J.R., et al., *Infiltration of the abdominal wall with local anaesthetic after total abdominal hysterectomy has no opioid-sparing effect.* British Journal of Anaesthesia, 2000. **84**(2): p. 248-9.
27. Ng, A., et al., *Effect of transcervical papaverine and bupivacaine on postoperative analgesia after laparoscopic application of Filshie clips.* Br J Anaesth, 2001. **87**: p. 663P
28. Ng, A., et al., *Randomized controlled trial investigating the effect of transcervical papaverine and bupivacaine on postoperative analgesia following laparoscopic sterilization.* European Journal of Anaesthesiology, 2002. **19**(11): p. 803-7.
29. Ellis, R., et al., *Pain relief after abdominal surgery--a comparison of i.m. morphine, sublingual buprenorphine and self-administered i.v. pethidine.* British Journal of Anaesthesia, 1982. **54**(4): p. 421-8.
30. Smith, G., *Cardiff Palliator.* Br J Anaesth, 1984. **56**: p. 311.
31. Derbyshire, D.R., et al., *Comparison of the Cardiff Palliator and Leicester Micropalliator in the relief of postoperative pain.* Br J Anaesth, 1985. **57**: p. 820
32. Burt, D.R., et al., *The Leicester Micropalliator*, in *Patient Controlled Analgesia*, M. Harmer, M. Rosen, and M.D. Vickers, Editors. 1985 Blackwell, : London. p. 97-101.
33. Vickers, A.P., et al., *Comparison of the Leicester Micropalliator and the Cardiff Palliator in the relief of postoperative pain.* British Journal of Anaesthesia, 1987. **59**(4): p. 503-9.

34. Fell, D., K. Achola, and G. Smith, *Plasma catecholamines in anaesthesia.* Br J Anaesth, 1982 **54**: p. 231P
35. Derbyshire, D.R. and G. Smith, *Sympathoadrenal responses to anaesthesia and surgery.* British Journal of Anaesthesia, 1984. **56**(7): p. 725-39.
36. Cotton, B.R., et al., *Changes in plasma catecholamine concentrations following infiltration with large volumes of local anaesthetic solution containing adrenaline.* British Journal of Anaesthesia, 1986. **58**(6): p. 593-7.
37. Coley, S., et al., *Sympathoadrenal responses to tracheal intubation after thiopentone or propofol.* Br J Anaesth, 1987. **59**: p. 659-660P
38. Crawford, D.C., et al., *Effects of alfentanil on the pressor and catecholamine responses to tracheal intubation.* British Journal of Anaesthesia, 1987. **59**(6): p. 707-12.
39. Derbyshire, D.R., G. Smith, and K.J. Achola, *Effect of topical lignocaine on the sympathoadrenal responses to tracheal intubation.* British Journal of Anaesthesia, 1987. **59**(3): p. 300-4.
40. Shribman, A.J., G. Smith, and K.J. Achola, *Cardiovascular and catecholamine responses to laryngoscopy with and without tracheal intubation.* Br J Anaesth, 1987. **59**: p. 295-299
41. Turner, D.A., et al., *Effect of halothane on cardiovascular and plasma catecholamine responses to tracheal intubation.* British Journal of Anaesthesia, 1986. **58**(12): p. 1365-70.
42. Achola, K.J., et al., *Effects of beta-adrenoceptor antagonism on the cardiovascular and catecholamine responses to tracheal intubation.* Anaesthesia, 1988. **43**(6): p. 433-6.
43. Wilson, I.G., B. Meiklejohn, and G. Smith, *Effect of i.v. lignocaine on the cardiovascular and catecholamine responses to laryngoscopy and intubation.* Br J Anaesth, 1991. **65**: p. 288-289
44. Aitkenhead, A.R., et al., *Effects of respiratory therapy on plasma catecholamines.* Anesthesiology, 1984. **61**: p. A44
45. Aitkenhead, A.R., et al., *Effects of naloxone on catecholamines and induced pain in healthy volunteers.* Eur J Anaesthesiol, 1986. **3**: p. 72.
46. Thompson, J.P., et al., *Cardiovascular and catecholamine responses during endovascular and conventional abdominal aortic aneurysm*

repair. European Journal of Vascular & Endovascular Surgery, 1999. **17**(4): p. 326-33.
47. Lew, J.K.L., et al., *Plasma catecholamine concentrations – changes after infiltration with local anaesthetic solutions and adrenaline during bat-ear surgery.* Anaesthesia, 1988. **43**: p. 490-492
48. Hayse-Gregson, P.B., K.J. Achola, and G. Smith, *Changes in haemodynamics and plasma catecholamine concentrations after field block for inguinal herniorraphy using lignocaine with adrenaline.* Anaesthesia, 1990. **45**: p. 7-10.
49. Thompson, J.P., et al., *Cardiovascular and catecholamine responses to endovascular abdominal aortic aneurysm repair.* Br J Anaesth, 1998. **80**: p. (Supplement 1) 59.
50. Smith, G., R. Dalling, and T.I. Williams, *Gastro-oesophageal pressure gradient changes produced by induction of anaesthesia and suxamethonium.* British Journal of Anaesthesia, 1978. **50**(11): p. 1137-43.
51. Cotton, B.R. and G. Smith, *Duration of action of i.v. atropine and metoclopramide and the effects of their consecutive administration on the lower oesophageal sphincter pressure.* Br J Anaesth, 1981. **53**(2): p. 188P.
52. Cotton, B.R. and G. Smith, *Comparison of the effects of atropine and glycopyrrolate on the lower oesophageal sphincter pressure.* Br J Anaesth, 1981. **53**: p. 875-879.
53. Cotton, B.R. and G. Smith, *Single and combined effects of atropine and metoclopramide on the lower oesophageal sphincter pressure.* Br J Anaesth, 1981. **53**: p. 869-873.
54. Cotton, B.R., G. Smith, and D. Fell, *Effects of oral diazepam on lower oesophageal sphincter pressure.* Br J Anaesth, 1981. **53**: p. 1147-1150.
55. Smith, G., B.R. Cotton, and D. Fell, *Diazepam reduces lower oesophageal sphincter pressure.* Br J Anaesth, 1982. **54**: p. 231P
56. Vater, M., et al., *ß-blocking drugs and the lower oesophageal sphincter.* Br J Anaesth, 1982. **54**: p. 899-900.
57. Hunt, P., B.R. Cotton, and G. Smith, *Effects of pancuronium atracurium and vecuronium on the lower oesophageal sphincter.* Br J Anaesth, 1983. **55**: p. 1155-1156.

58. Hunt, P.C.W., B.R. Cotton, and G. Smith, *Comparison of the effects of pancuronium and atracurium on the lower oesophageal sphincter.* Anesth Analg, 1984. **63**: p. 65-68.
59. Hunt, P.C.W., B.R. Cotton, and G. Smith, *Barrier pressure and muscle relaxants. Comparison of the effects of pancuronium and vecuronium on the lower oesophageal sphincter* Anaesthesia, 1984. **39**: p. 412-415.
60. Smith, G., P. Hunt, and B.R. Cotton, *Pancuronium but not atracurium increases lower oesophageal sphincter pressure.* Eur J Anaesthesiol, 1984. **1**: p. 160.
61. Turner, D.A. and G. Smith, *Evaluation of the combined effects of atropine and neostigmine on the lower oesophageal sphincter.* British Journal of Anaesthesia, 1985. **57**(10): p. 956-9.
62. Turner, D.A.B., A.M. Vickers, and G. Smith, *Evaluation of the combined effects of atropine and domperidone on the lower oesophageal sphincter.* Eur J Anaesthesiol, 1985. **2**: p. 309-315
63. Derrington, M.C., N. Hindocha, and G. Smith, *Evaluation of the combined effects of glycopyrrolate and neostigmine on the lower oesophageal sphincter.* Br J Anaesth, 1987. **59**: p. 545-547
64. Heijke, S.A.M., G. Smith, and A. Key, *Effect of the Trendelenberg position on lower oesophageal sphincter pressure.* Br J Anaesth, 1990. **65**: p. 288.
65. Heijke, S.A., G. Smith, and A. Key, *Comparison of the combined effects of atropine and neostigmine with atropine and edrophonium on the lower oesophageal sphincter.* Anaesthesia, 1991. **46**(8): p. 628-31.
66. Heijke, S.A., G. Smith, and A. Key, *The effect of the Trendelenburg position on lower oesophageal sphincter tone.* Anaesthesia, 1991. **46**(3): p. 185-7.
67. Cotton, B.R. and G. Smith, *The lower oesophageal sphincter*, in *Anaesthesia Review I*, L. Kaufman, Editor. 1982, Churchill Livingstone Edinburgh. p. 65-75
68. Cotton, B.R. and G. Smith, *The lower oesophageal sphincter and anaesthesia.* British Journal of Anaesthesia, 1984. **56**(1): p. 37-46.
69. Smith, G. and A. Ng, *Gastric reflux and pulmonary aspiration in anaesthesia.* Minerva Anestesiologica, 2003. **69**(5): p. 402-6.

70. Ledingham, I.M., et al., *Haemodynamic and myocardial effects of hyperbaric oxygen in dogs subjected to haemorrhage.* Cardiovasc Res, 1971. **5**: p. 277-285.
71. Dewar, K.M.S., et al., *The effect of hyperoxia on airways resistance in man.* J Appl Physiol, 1972. **32**: p. 486-490.
72. Smith, G. and I.M. Ledingham, *The effect of prolonged hyperoxia on the cardiovascular system of anaesthetised dogs.* Br J Anaesth, 1972. **44**: p. 469-472. .
73. Wishart, H.Y., T.I. Williams, and G. Smith, *A comparison of the effect of three anaesthetic techniques on postoperative arterial oxygenation in the elderly.* British Journal of Anaesthesia, 1977. **49**(12): p. 1259-63.
74. Winter, P.M., et al. *Hyperbaric nitrous oxide anaesthesia in man: determination of anaesthetic potency (MAC) and cardiorespiratory effects* in *ASA Annual Meeting*. 1972. Boston USA.
75. Hornbein, T.F., et al., *The minimum alveolar concentration of nitrous oxide in man.* Anesth Analg, 1982. **61**: p. 553-556
76. Spence, A.A. and G. Smith, eds. *The performance of anaesthetic equipment under hyperbaric conditions*. Performance Characteristics of Anaesthetic and Related Equipment, ed. G. Wyant. 1974, International Anesthesiology Clinics.
77. Spence, A.A., G. Smith, and R. Harris, *The influence of continuous extradural analgesia on lung function in the postoperative period.* Anaesthesia, 1970. **25**: p. 126.
78. Jain, A.K., et al., *Comparison of oral nalbuphine, acetaminophen, and their combination in postoperative pain.* Clinical Pharmacology & Therapeutics, 1986. **39**(3): p. 295-9.
79. Bone, M.E., S. Dowson, and G. Smith, *A comparison of nalbuphine with fentanyl for postoperative pain relief following termination of pregnancy under day care anaesthesia.* Anaesthesia, 1988. **43**(3): p. 194-7.
80. Jain, A., et al., *A double-blind study of diflunisal and codeine compared with codeine or diflunisal alone in postoperative pain.* Clinical Pharmacology & Therapeutics, 1988. **43**(5): p. 529-35.
81. Robinson, S.L., D.J. Rowbotham, and G. Smith, *Morphine compared with diamorphine. A comparison of dose requirements and side-effects after hip surgery.* Anaesthesia, 1991. **46**(7): p. 538-40.

82. Boyle, J.R., et al., *Improved respiratory function and analgesia control after endovascular AAA repair.* Journal of Endovascular Surgery, 1997. **4**(1): p. 62-5.
83. Hall, A.P. and G. Smith, *Anaesthesia and the upper airway.* South African Journal of Anaesthesiology and Analgesia, 1998. **4**: p. 12-14.
84. Spence, A.A. and G. Smith, *Postoperative analgesia and lung function: a comparison of morphine with extradural block. 1971.* British Journal of Anaesthesia, 1998. **81**(6): p. 984-8; discussion 982-3.
85. Armory, P., et al., *Comparison of morphine and pethidine administered by patient-controlled analgesia systems for postoperative pain relief after large bowel anastomosis.* Br J Anaesth, 2000. **84**: p. 280-281
86. Ng, A. and G. Smith, *Gastroesophageal reflux and aspiration of gastric contents in anesthetic practice.* Anesthesia & Analgesia, 2001. **93**(2): p. 494-513.
87. Ng, A., et al., *Does the opioid-sparing effect of rectal diclofenac following total abdominal hysterectomy benefit the patient?* British Journal of Anaesthesia, 2002. **88**(5): p. 714-6.
88. Ng, A., J. Shah, and G. Smith, *Is continuous spinal analgesia via an epidural catheter appropriate after accidental subarachnoid administration of 15mL of bupivacaine 0.1% containing fentanyl 2 µg/mL? I.* Intern J Obstetric Anesth, 2003.
89. Ng, A., G. Smith, and A.C. Davidson, *Analgesic effects of parecoxib following total abdominal hysterectomy.* British Journal of Anaesthesia, 2003. **90**(6): p. 746-9.
90. Ng, A., J. Shah, and G. Smith, *Is continuous spinal analgesia via an epidural catheter appropriate after accidental subarachnoid administration of 15 mL of bupivacaine 0.1% containing fentanyl 2 micrograms/mL?* International Journal of Obstetric Anesthesia, 2004. **13**(2): p. 107-9.
91. Ng, A., et al., *Early analgesic effects of parecoxib versus ketorolac following laparoscopic sterilization: a randomized controlled trial.* British Journal of Anaesthesia, 2004. **92**(6): p. 846-9.
92. Ng, A., et al., *Early analgesic effects of intravenous parecoxib and rectal diclofenac following laparoscopic sterilization: a double-*

blind, double-dummy randomized controlled trial. Journal of Opioid Management, 2008. **4**(1): p. 49-53.

93. Logan, D.A., A.A. Spence, and G. Smith, *Postoperative pulmonary function. A comparison of ventilation with nitrogen or nitrous oxide during anaesthesia.* Anaesthesia, 1977. **32**(1): p. 3-7.
94. Allison, R., A.W. Shirley, and G. Smith, *Threshold concentration of nitrous oxide affecting psychomotor performance.* Br J Anaesth, 1979. **51**: p. 177-180.
95. Thorburn, J., et al., *Effect of nitrous oxide on the cardiovascular system and coronary circulation of the dog.* Br J Anaesth, 1979. **51**: p. 937-942.
96. Smith, G., et al., *The effect of halothane on myocardial blood flow and oxygen consumption.* Br J Anaesth, 1973. **45**: p. 928-929.
97. Smith, G., J.P. Vance, and D. Brown, *The effect of propanidid on myocardial blood flow and oxygen consumption in the dog.* Br J Anaesth, 1973. **45**: p. 691-696.
98. Vance, J.P., D. Brown, and G. Smith, *The effects of hypocapnia on myocardial blood flow and metabolism.* Br J Anaesth, 1973. **45**: p. 455-463.
99. McMillan, J.C., et al., *The effect of methohexitone on myocardial blood flow and oxygen consumption in the dog.* Br J Anaesth, 1974. **46**: p. 729-732. .
100. Vance, J.P., et al., *The combined effect of halothane-induced hypotension and hypocapnia on canine myocardial blood flow and oxygen consumption.* Br J Anaesth, 1975. . **47**: p. 825-829
101. Smith, G., et al., *The effects of ketamine on the canine coronary circulation.* Anaesthesia, 1979. **34**: p. 555-561.
102. Smith, G., K. Rogers, and J. Thorburn, *Halothane improves the balance of oxygen supply to demand in acute experimental myocardial ischaemia.* 52, 1980. **577-583**.
103. Smith, G., J.T. Thorburn, and K. Rogers, *Effects of thiopentone on the canine coronary circulation in acute experimental myocardial ischaemia.* Acta Anaesth Scand, 1982. **26**: p. 126-129
104. Smith, G., et al., *Enflurane improves the oxygen supply/demand balance in the acutely ischaemic canine myocardium.* Acta Anaesth Scand, 1982. **26**: p. 44-47.

105. Smith, G., et al., *Changes in canine myocardial blood flow and oxygen consumption in response to halothane.* Br J Anaesth, 1974. **46**: p. 821-826.
106. Vance, J.P., et al., *Some aspects of myocardial blood flow in anaesthesia.* Anaesthesia, 1974. **29**(1): p. 112-3.
107. Vance, J.P., et al., *Effect of hypotension induced with sodium nitroprusside on canine coronary arterial flow.* Br J Anaesth, 1979. **51**: p. 297.
108. Vance, J.P., et al., *Canine coronary blood flow response to hypoxaemia: the influence of halothane.* Br J Anaesth, 1979. **51**: p. 193-197.
109. Vance, J.P., et al., *Response of mean and phasic coronary arterial blood flow to graded hypercapnia in dogs.* Br J Anaesth, 1979. **51**: p. 523-529.
110. Smith, G., K. Rogers, and J. Thorburn. *Effect of anaesthetic agents and techniques in acute experimental myocardial ischaemia*. in *7th World Congress Anesthesiologists*. 1980. Amsterdam.: Excerpta Medica.
111. Smith, G., *Beneficial effects of halothane on myocardial ischemia.* Anesthesiology, 1981. **55**: p. 479-480.
112. Smith, G., *Anaesthesia and myocardial ischaemia.* British Journal of Anaesthesia, 1988. **61**(1): p. 1-2.
113. Fell, D., et al., *Measurement of plasma catecholamine concentrations. An assessment of anxiety.* British Journal of Anaesthesia, 1985. **57**(8): p. 770-4.
114. Pinnock, C.A., et al., *Anxiety levels in junior anaesthetists during early training.* Anaesthesia, 1986. **41**(3): p. 258-62.
115. Smith, G. and I.M. Ledingham, *The effect of prolonged hyperoxia on cardiovascular dynamics.* Clin Sci, 1970. **39**: p. 12P.
116. Smith, G., I.M. Ledingham, and A.T. Sandison, *Pulmonary oxygen toxicity: pathophysiology and effects of N2 mixture.* Clin Sci, 1970. **38**: p. 12P.
117. Smith, G., D.W. Proctor, and A.A. Spence, *A comparison of the cardiovascular effects of pancuronium and curare in dogs.* Br J Anaesth, 1970. **43**: p. 923-927.

118. Smith, G., D.M.S. Dewar, and A.A. Spence, *The effect of high inspired partial pressures of oxygen on conscious volunteers.* Br J Anaesth, 1971. **43**: p. 1119.
119. Smith, G. and I.M. Ledingham, *The influence of halothane anaesthesia on oxygen toxicity.* British Journal of Anaesthesia, 1971. **43**(6): p. 553-60.
120. Winter, P.M. and G. Smith, *The toxicity of oxygen.* Anesthesiology, 1972. **37**: p. 21-24. .
121. Clarke, G.M., et al., *Acute pulmonary oxygen toxicity in spontaneously breathing anaesthetised dogs.* Am J Physiol, 1973. **224**: p. 248-255
122. Smith, G., *Hyperoxy and hyperbaric oxygenation: effects on the lung.* Pneumonology, 1973. **148**: p. 1-5.
123. Smith, G., P.M. Winter, and R.F. Wheelis, *Increased normobaric oxygen tolerance of rabbits following oleic acid induced lung damage.* J Appl Physiol, 1973. **35**: p. 393-400.
124. Smith, G., P.M. Winter, and R.F. Wheelis, *Delayed rate of development of pulmonary oxygen toxicity following oleic acid induced lung damage.* Br J Anaesth, 1973. **45**: p. 641.
125. Shapiro, H.M., et al., *Errors in sampling pulmonary arterial blood with a Swan Ganz catheter.* Anesthesiology, 1974. **40**: p. 291-295.
126. Smith, G., *Editorial. Pulmonary oxygen toxicity.* Br J Anaesth, 1974. **46**: p. 325-326.
127. Smith, G., et al., *Oesophageal apoplexy.* Lancet, 1974. **1**(7854): p. 390-2.
128. Smith, G., F.W. Cheney, and P.M. Winter, *The effect of change in cardiac output on intrapulmonary shunting.* Br J Anaesth, 1974. **46**: p. 337-342.
129. Winter, P.M., G. Smith, and R.F. Wheelis, *The effect of prior pulmonary injury on the development of fatal oxygen toxicity.* Chest, 1974. **66**: p. (suppl): 1S-4S. .
130. Shield, T.G., G. Smith, and I.M. Ledingham, *Mechanisms of oxygen toxicity.* Br J Anaesth, 1975. **47**: p. 904.
131. Smith, G., *Editorial. Oxygen and the Lung.* Br J Anaesth, 1975. **47**: p. 645-646.
132. Smith, G. and T.G. Shields, *Oxygen toxicity.* Pharmac Therap 1975. **1**(4): p. 731-756.

133. Smith, G., *The coronary circulation and anaesthesia.* Br J Anaesth, 1976. **48**: p. 933-934.
134. Smith, G. and A.W. Shirley, *Failure to demonstrate effects of trace concentrations of N20 and halothane on psychomotor performance.* Br J Anaesth, 1977. **49**: p. 65-70.
135. Douglas, I.H.D., et al., *Effect of halothane on PO2 electrodes.* Lancet, 1978(2): p. 1370–1371.
136. Smith, G., *Pollution and performance.* Br J Anaesth, 1978. **50**: p. 207-208.
137. Smith, G., *Oxygen toxicity.* Anaesthesia, 1978. **33**: p. 274-275.
138. Smith, G., et al., *The effect of thiopentone and suxamethonium on gastro-oesophageal pressure gradients.* Br J Anaesth, 1978. **50**: p. 76-77.
139. Smith, G. and A.W. Shirley, *A review of the effects of trace concentrations of anaesthetics on performance.* Br J Anaesth, 1978. **50**: p. 701-712.
140. Drummond, A.R., et al., *The effect of anaesthesia on blood viscosity and its determinants in patients undergoing surgery for fractured neck of femur.* Thrombosis Research., 1980.
141. Grant, I.S., G. Smith, and A.W. Shirley, *The audiovisual reaction time test. Use in assessment of recovery from Althesin anaesthesia.* Anaesthesia, 1980. **35**(9): p. 869-72.
142. Gray, T.C., J.F. Nunn, and J.E. Utting, eds. *Oxygen toxicity*. General Anaesthesia. 1980, Butterworths, London.
143. McKenzie, P.J., et al., *Comparison of the effects of spinal anaesthesia and general anaesthesia on postoperative oxygenation and perioperative mortality.* British Journal of Anaesthesia, 1980. **52**(1): p. 49-54.
144. McKenzie, P.J., et al., *Comparison of the effects of spinal anaesthesia and general anaesthesia on postoperative oxygenation and perioperative mortality.* Br J Anaesth, 1980. **52**: p. 49-54.
145. Smith, G., *Competitive neuromuscular blocking drugs and the cardiovascular system* in *Neuromuscular transmission and anaesthetic agents: current information*, O. Teknika., Editor. 1980 p. 1-8.
146. Cotton, B. and G. Smith, *Anticholinergic premedication and regurgitation.* Br J Anaesth, 1981. **53**: p. 445–446

147. Ellis, R., et al., *Comparison of i.m. morphine, sublingual buprenorphine, and self-administered i.v. pethidine for pain relief after operation.* Br J Anaesth, 1981. **53**: p. 665P.
148. Jain, A.K., et al., *Evaluation of intramuscular levonantradol and placebo in acute postoperative pain.* Journal of Clinical Pharmacology, 1981. **21**(8-9 Suppl): p. 320S-326S.
149. Smith, G., *Halothane in clinical practice.* Br J Anaesth, 1981. **53**: p. Suppl I:17-25S. .
150. Fell, D., et al., *Plasma catecholamine responses to endotracheal intubation.* Br J Anaesth, 1982. **54**: p. 1135.
151. Smith, G., *Pre-treatment with nondepolarizing muscle relaxant does not decrease gastric regurgitation following succinylcholine.* Anesthesiology, 1982. **56**: p. 408-409.
152. Smith, G., *Anaesthesia and coronary heart disease*, in *Inhalation Anesthesia Today and Tomorrow*, K. Peter and F. Jesch, Editors. 1982, Springer Verlag. p. 79.
153. Smith, G. and T.G. Shields, *Oxygen toxicity*, in *Respiratory Pharmacology in International Encyclopaedia of Pharmacology and Therapeutics Section 104*, J.G. Widdicombe, Editor. 1982, Pergamon Press: Oxford. p. 269-295.
154. Aitkenhead, A.R., et al., *Pharmacokinetics of single dose iv morphine in normal volunteers and patients with end stage renal failure.* Br J Anaesth, 1983. **55**: p. 905
155. Derbyshire, D.R., et al., *Plasma catecholamine responses to tracheal intubation.* British Journal of Anaesthesia, 1983. **55**(9): p. 855-60.
156. Fell, D., B.R. Cotton, and G. Smith, *I.M. Atropine and regurgitation.* Br J Anaesth, 1983. **55**: p. 256-257
157. Vater, M., K. Achola, and G. Smith, *Catecholamine responses during anaesthesia for phaeochromocytoma.* British Journal of Anaesthesia, 1983. **55**(4): p. 357-60.
158. Aitkenhead, A.R., et al., *Pharmacokinetics of intravenous naloxone in healthy volunteers.* Anesthesiology, 1984. **61**: p. A381.
159. Aitkenhead, A.R., et al., *Pharmacokinetics of single-dose i.v. morphine in normal volunteers and patients with end-stage renal failure.* Br J Anaesth, 1984. **56**: p. 813-819
160. Chierchia, S., et al., *Role of heart rate in pathophysiology of chronic stable angina.* Lancet, 1984. **2**(8416): p. 1353-7.

161. Cotton, B.R. and G. Smith, *Regurgitation and aspiration*, in *Anaesthesia Review 2*, L. Kaufman, Editor. 1984, Churchill Livingstone: London. p. 162-177
162. Derbyshire, D.R., et al., *Midazolam and induction of anaesthesia.* Anaesthesia, 1984. **39**(1): p. 69-70.
163. Derbyshire, D.R., et al., *Midazolam and thiopentone: catecholamine and arterial pressure responses to induction and tracheal intubation in the elderly* Br J Anaesth, 1984. **56**: p. 429.
164. Foex, P. and G. Smith, *The adrenals and sympathoadrenal system.* Br J Anaesth, 1984. **56**: p. 675
165. McKenzie, P.J., H.Y. Wishart, and G. Smith, *Long-term outcome after repair of fractured neck of femur. Comparison of subarachnoid and general anaesthesia.* British Journal of Anaesthesia, 1984. **56**(6): p. 581-5.
166. Nimmo, W.S. and G. Smith, *Opioid agonist/antagonist drugs in clinical practice*. 1984, Excerpta Medica: Amsterdam. .
167. Nimmo, W.S. and G. Smith, *Pain -a general perspective*, in *Opioid agonist/antagonist drugs in clinical practice*1984: Amsterdam. p. 3-13
168. Smith, G., *Postoperative pain*, in *Quality of care in anaesthetic practice*, J.N. Lunn, Editor. 1984, MacMillan: London p. 164-179.
169. Smith, G., *A brief review of postoperative pain*, in *Advances in morphine therapy*. 1984, The Royal Society of Medicine: London. p. 11-17.
170. Smith, G. and G.M. Hall, *Anaesthesia and the gastrointestinal tract.* Br J Anaesth, 1984. **56**: p. 1.
171. Taylor, S., K. Achola, and G. Smith, *Plasma catecholamine concentrations. The effects of infiltration with local analgesics and vaso-constrictors during nasal operations.* Anaesthesia. , 1984. **39**: p. 520-523
172. McKenzie, P.J., et al., *Effects of anaesthetic technique on deep vein thrombosis. A comparison of subarachnoid and general anaesthesia.* British Journal of Anaesthesia, 1985. **57**(9): p. 853-7.
173. Pinnock, C., et al., *Effect of sleep deprivation on choice reaction time.* Br J Anaesth, 1985. **57**: p. 346.

174. Pinnock, C.A., A. Bell, and G. Smith, *A comparison of nalbuphine and morphine as premedication agents for minor gynaecological surgery.* Anaesthesia, 1985. **40**: p. 1078-1081.
175. Pinnock, C.A., et al., *A comparison of triazolam and diazepam as premedication agents for minor gynaecological surgery.* Anaesthesia, 1985. **40**: p. 324-328
176. Pinnock, C.A. and G. Smith, *Naloxone – paradox or pancea? .* Br J Anaesth, 1985. **57**: p. 547-549.
177. Smith, G. and A.R. Aitkenhead, *Textbook of Anaesthesia*. 1985, Edinburgh: Churchill Livingstone.
178. Smith, G. and A.R. Aitkenhead, *Hyperbaric medicine*, in *Physics in Medicine and Biology Encyclopaedia*, T.F. McAinsh, Editor. 1985, Pergamon Press: Oxford. p. 220-222.
179. Smith, G. and C.M. Conway, *Anaesthetic Equipment.* Br J Anaesth, 1985. **57**: p. 639.
180. Smith, G. and B.G. Covino, *Acute Pain*. 1985, London Butterworth.
181. Smith, G. and D.G. McDowall, *Brain Ischaemia – its prevention and treatment.* Br J Anaesth, 1985. **57**: p. 1-30
182. Pinnock, C.A., et al., *Absorption of controlled release morphine sulphate in the immediate postoperative period.* British Journal of Anaesthesia, 1986. **58**(8): p. 868-71.
183. Smith, G., *Local anaesthesia.* Br J Anaesth, 1986. **58**: p. 691.
184. Smith, G., *Applied use of opioids in acute pain*, in *International Congress and Symposium Series, No 107, Opioids – use and abuse*, J. Levy and K. Budd, Editors. 1986, Royal Society of Medicine Services: London. p. 39-41.
185. Smith, G. and A.R. Aitkenhead, *Aspects of intensive care.* Br J Anaesth, 1986. **40**: p. 137.
186. Eastley, R.J., D. Fell, and G. Smith, *A comparative study of diazepam with sustained release diazepam as oral premedication in minor gynaecological surgery.* Curr Med Res Opin, 1986 **10** p. 235-240
187. Bentsi, I.K., et al., *Antibiotic prophylaxis for prostatic surgery. Single-dose cephradine compared with single-dose cefotaxime.* British Journal of Urology, 1987. **59**(4): p. 314-8.
188. Bone, M.E., et al., *Comparison of the haemodynamic responses to induction of anaesthesia with either propofol or thiopentone in ASA III patients.* Br J Anaesth, 1987. **59**: p. 1318-1332

189. Derrington, M.C. and G. Smith, *A review of studies of anaesthetic risk, morbidity and mortality.* British Journal of Anaesthesia, 1987. **59**(7): p. 815-33.
190. Meiklejohn, B.H., et al., *Arterial oxygen desaturation during postoperative transportation: the influence of operation site.* Anaesthesia, 1987. **42**: p. 1313-1315.
191. Smith, G. and M.J. Halsey, *Adverse effects of drugs used in anaesthesia.* Br J Anaesth, 1987.
192. Smith, G. and J. Norman, *Complications and medico-legal aspects of anaesthesia.* British Journal of Anaesthesia, 1987. **59**(7): p. 813-4.
193. Smith, G., A.J. Shribman, and D.R. Derbyshire, *The contribution of laryngoscopy to the sympathoadrenal response to tracheal intubation.* Eur J Anaesthesiol, 1987. **4**: p. 61-62
194. Smith, G., *Editorial changes in British Journal of Anaesthesia.* Br J Anaesth, 1988. **60**: p. 1.
195. Heijke, S.A.M. and G. Smith, *Quest for the ideal inhalational anaesthetic agent.* Br J Anaesth, 1989. **64**: p. 3-6.
196. Kabay, S., N.B. Jones, and G. Smith, *A system for real-time measurement and control in high frequency jet ventilation*, in *IFAC-BME, Decision support for patient management: measuring, modelling and control*. 1989. p. 151-160
197. Mapleson, W.W., G. Smith, and M.K. Sykes, *High frequency ventilation.* Br J Anaesth, 1989. **63**: p. 1S-2S
198. Mitchell, R.W. and G. Smith, *The control of acute postoperative pain.* British Journal of Anaesthesia, 1989. **63**(2): p. 147-58.
199. Mottram, S.D., et al., *Frequency response and gas exchange during high frequency jet ventilation in the pig* Br J Anaesth, 1989. **63**: p. 108S-109S.
200. Nimmo, W.S. and G. Smith, *Anaesthesia*. 1989, London: Blackwell. pp1496.
201. Smith, G., *Management of post-operative pain.* Canadian Journal of Anaesthesia, 1989. **36**(3 Pt 2): p. S1-4.
202. Smith, G., *Postoperative pain*, in *Anaesthesia*, W.S. Nimmo and G. Smith, Editors. 1989, Blackwell: London. p. 1175-1198.
203. Smith, G., *Journal of the College of Anaesthetists.* Br J Anaesth, 1989. **64**: p. 1-2.

204. Jones, M.J., et al., *Measurement of entrainment ratio during high frequency jet ventilation.* Br J Anaesth, 1990. **65**: p. 197-203.
205. Langton, J.A., R. Stevens, and G. Smith, *A technique to assess laryngeal damage following tracheal intubation.* Br J Anaesth, 1990. **65**: p. 590-591.
206. Langton, J.A., et al., *Preliminary observations of vocal cord movements on induction of anaesthesia with propofol or thiopentone.* Br J Anaesth, 1990. **65**: p. 582-583
207. Lin, E.S., et al., *Relationship between resonance and gas exchange during high frequency jet ventilation.* Br J Anaesth, 1990. **64**: p. 453-459.
208. Fell, D., et al., *MCQ Companion to the Textbook of Anaesthesia*. 1991: Churchill Livingstone. 276.
209. Langton, J., et al., *A portable method to assess upper airway reactivity.* Br J Anaesth, 1991. **67**: p. 648-649
210. Murphy, J.P., et al., *Investigation of the effect of oral diazepam on upper airway reactivity.* Br J Anaesth, 1991. **67**: p. 660-661.
211. Smith, G., *Pain after surgery.* British Journal of Anaesthesia, 1991. **67**(3): p. 233-4.
212. Smith, G., *Anaesthesia for vascular surgery*, in *Surgical Management of Vascular Disease*, P.R.F. Bell, C.W. Jamieson, and C.V. Ruckley, Editors. 1991, Saunders: London. p. 291-307.
213. Smith, G., et al., *Ethics in publishing.* Br J Anaesth, 1991. **66**: p. 421-422
214. Wilson, I.G., B. Meiklejohn, and G. Smith, *Intravenous lignocaine and sympathoadrenal responses to laryngoscopy and intubation.* Anaesthesia, 1991. **46**: p. 177-180.
215. Bailey, S., et al., *Measurement of voice wavelength variability in patients after tracheal extubation for intensive care.* Br J Anaesth 1992. **68**: p. 441
216. Barker, P., et al., *Movements of the vocal cords on induction of anaesthesia with thiopentone or propofol.* British Journal of Anaesthesia, 1992. **69**(1): p. 23-5.
217. Erskine, R.J., et al., *Effect of age on the sensitivity of upper airway reflexes.* Br J Anaesth, 1992. **69**: p. 538-539.

218. Rabey, P.G. and G. Smith, *Anaesthetic factors contributing to postoperative nausea and vomiting.* Br J Anaesth, 1992. **69**: p. 40S-45S
219. Rowbotham, D.J. and G. Smith, *Postoperative nausea and vomiting.* Br J Anaesth, 1992. **69**: p. 1S
220. Smith, G., *Changes in 1992.* Br J Anaesth, 1992. **68**: p. 1-2.
221. Smith, G., *Dual publication of abstracts.* Br J Anaesth, 1992. **68**: p. 5.
222. Smith, G., ed. *Handbook of British Anaesthesia 1992/3*. 1992, Professional and Scientific Publications: London. 120.
223. Smith, G. and D. Rowbotham, eds. *Supplement on postoperative nausea and vomiting*. Br J Anaesth Supplement. 1992. 1S – 65S.
224. Wilson, I.G., et al., *Cardiovascular responses to insertion of the laryngeal mask.* Anaesthesia, 1992. **47**(4): p. 300-2.
225. Erskine, R.J., et al., *Effect of age on the sensitivity of upper airway reflexes.* Br J Anaesth, 1993.
226. Langton, J.A., et al., *Measurement of sensitivity of upper airway reflexes.* Br J Anaesth, 1993. **70**: p. 126-130.
227. Murphy, P.J., et al., *Effect of oral diazepam on the sensitivity of upper airway reflexes.* Br J Anaesth, 1993. **70**: p. 131-134.
228. Smart, D., G. Smith, and D.G. Lambert, *Halothane enhances the formation of inositol (1,4,5) triphosphate mass in human neuroblastoma cells.* Br J Anaesth, 1993. **71**: p. 307.
229. Smith, G. and J. Sear, eds. *Handbook of British Anaesthesia 1993/94*. 1993, Professional and Scientific Publications: London. 120.
230. Wilson, I.G. and G. Smith, *The management of acute pain.* Hospital Update, 1993. **19**: p. 214-222
231. Dahnoun, N., et al., *An optical technique for the measurement of thoracic wall movement during high-frequency jet ventilation.* Physiology Measurements, 1994. **15**: p. 271-279.
232. Ogilvy, A.J. and G. Smith, *Postoperative pain*, in *Anaesthesia*, W. Nimmo, S,, D.J. Rowbotham, and G. Smith, Editors. 1994, Blackwell Scientific Publications: London. p. 1570-1601
233. Oyama, T. and G. Smith, eds. *Pain and Kampo: The use of Japanese herbal medicine*. Management of pain. 1994, Springer Verlag: London. 183.

234. Smart, D., G. Smith, and D.G. Lambert, *Halothane and isoflurane enhance basal and carbachol-stimulated inositol(1,4,5)triphosphate formation in SH-SY5Y human neuroblastoma cells.* Biochemical Pharmacology, 1994. **47**(6): p. 939-45.
235. Smart, D., G. Smith, and D.G. Lambert, *μ-Opioid receptor stimulation in inositol (1,4,5) triphosphate formation via a pertussis toxin-sensitive G protein.* J Neurochem, 1994. **62**: p. 1009-1014
236. Smart, D., G. Smith, and D.G. Lambert, *Are G-protein Beta/Gamma subunits responsible for the stimulation on INS(1,4,5)P3 Formation by μ-opioids in SH-SY5Y cells?* Br J Pharm, 1994. **112**: p. (suppl) 336P.
237. Smart, D., G. Smith, and D.G. Lambert, *Is Ca2+ channel opening responsible for the stimulation of INS(1,4,5) P3 formation by μ-opioids in SH-SY5Y cells?* Br J Pharm, 1994. **112**: p. (Suppl) 630.
238. Smith, G., *The role of the editors in: How to write a paper.* Br Med J Gr, 1994: p. 78-79.
239. Smith, G. and J.W. Sear, eds. *Handbook of British Anaesthesia 1994/95*. 1994, Professional Scientific Publication: London.
240. Gupta, S., et al.*Population pharmacokinetics / pharmacodynamic modeling of remifentanil*. in *Proceedings of the American Society of Clinical Pharmacology and Therapeutics*. 1995.
241. Lambert, D.G., G. Smith, and K.S. Sikand, *Is ketamine a voltage-sensitive Ca2+ channel blocker?* Br J Anaesth, 1995. **74**: p. 483
242. Ogilvy, A.J. and G. Smith, *The gastrointestinal tract after anaesthesia.* European Journal of Anaesthesiology - Supplement, 1995. **10**: p. 35-42.
243. Smart, D., G. Smith, and D.G. Lambert, *μ opioids activate phospholipase C in SH-SY5Y human neuroblastoma cells via calcium-channel opening.* J Biochem, 1995. **305**: p. 577-582
244. Smith, G., *Research in anaesthesia--the key to the future.* British Journal of Anaesthesia, 1995. **75**(4): p. 383-6.
245. Smith, G., *The use of propofol in anaesthesia and the critically ill.* Resuscitation, 1995. **13**: p. 39-55.
246. Smith, G. *Intraoperative stress – its measurement and modification*. in *Proceedings of the V11 World Congress on Endocrine Response to Stress and Peri-operative Pain Management*. 1995. University of Cadiz.

247. Smith, G., *Anaesthesia for definitive treatment of fractures*, in *Fractures and Dislocations: Principles of Management*, P.J. Gregg, J. Stevens, and P.H. Worlock, Editors. 1995, Blackwell Science: London. p. 188-202.
248. Ali, P.B. and G. Smith, *The effect of syntocinon on blood loss during first trimester suction curettage.* Anaesthesia, 1996. **51**(5): p. 483-5.
249. Lambert, D.G., et al., *Effects of propofol and thiopentone on potassium-and carbachol-evoked [3H]Noradrenaline release and increased [Ca2+]i from SH-SH5Y human neuroblastoma cells.* Biochem Pharmacol, 1996. **51**: p. 1613-1621.
250. Smith, G., *Impact factors in anaesthesia journals.* British Journal of Anaesthesia, 1996. **76**(6): p. 753-4.
251. Smith, G., *The 11th World Congress of Anaesthesiology.* Br J Anaesth, 1996. **76**: p. 479-480. .
252. Smith, G. and I.C. Henderson, *New treatments for breast cancer.* Seminars in Oncology, 1996. **23**(4): p. 506-28.
253. Sikand, K.S., et al., *Etomidate inhibits [3H] noradrenaline release from SH-SY5Y human neuroblastoma cells.* Neuroscience Letters, 1997. **236**: p. 1-4.
254. Smith, G., *Editorial: Personal reflections.* Br J Anaesth, 1997. **79**: p. 1.
255. Smith, G., *Recollections of an Editor.* Annals of the Scottish Society of Anaesthetists, 1997. **38**: p. 8-10
256. Thompson, J.P., et al. *Postoperative respiratory function and nocturnal hypoxia after conventional and endovascular abdominal aortic aneurysm repair*. in *Proceedings of the Eighth International Symposium on Pain, Anaesthesia and Endocrinology*. 1997. Leicester.
257. Williamson, K.M. and G. Smith, *Serum concentrations of lignocaine and pain relief after intraperitoneal administration during hysterectomy.* Can J Anaesth, 1997. **44**: p. A66
258. Cooper, C., et al., *Individual risk factors for hip osteoarthritis: obesity, hip injury, and physical activity.* American Journal of Epidemiology, 1998. **147**(6): p. 516-22.

259. Flynn, C.A., F. D'Amico, and G. Smith, *Should we patch corneal abrasions? A meta-analysis.* Journal of Family Practice, 1998. **47**(4): p. 264-70.
260. Hall, A.P., et al., *Upper airway reactivity and upper respiratory tract infection: effect of nebulized lignocaine.* Br J Anaesth, 1998. **81**: p. 279-280.
261. Katz, D.S., et al., *Spontaneous hemorrhage of abdominal splenosis.* Journal of Computer Assisted Tomography, 1998. **22**(5): p. 725-7.
262. Kiani, S.H., et al., *Assessment of upper airway reactivity following TIVA or inhalation anaesthesia.* Br J Anaesth, 1998. **81**: p. 278
263. Smith, G., *Ethics and research in anaesthesia.* Anaesthesia, 1998. **53**(9): p. 930.
264. Smith, G., *Commentary on: Johnstone M. The Human cardiovascular response to Fluothane anaesthesia. (British Journal of Anaesthesia 1956; 28: 392-410).* Br J Anaesth, 1998. **80**: p. 395.
265. Smith, G., *Anaesthetic accidents – an overview.* Anästhesiologie Intensivmedizin, 1998. **33**: p. S291
266. Smith, G. and I. Power, *Audit and bridging the analgesic gap.* Anaesthesia, 1998. **53**(6): p. 521-2.
267. Van Aken, H., et al., *150 years of anaesthesia--a long way to perioperative medicine: the modern role of the anaesthesiologist.* European Journal of Anaesthesiology, 1998. **15**(5): p. 520-3.
268. Hall, A.P., et al., *Upper airway reactivity and upper respiratory tract infection: effect of nebulized lidocaine.* British Journal of Anaesthesia, 1999. **82**(6): p. 857-60.
269. Hudspith, M.J., et al., *Effect of post-injury NMDA antagonist treatment on long-term Fos expression and hyperalgesia in a model of chronic neuropathic pain.* Brain Research, 1999. **822**(1-2): p. 220-7.
270. Munglani, R., et al., *Effect of pre-emptive NMDA antagonist treatment on long-term Fos expression and hyperalgesia in a model of chronic neuropathic pain.* Brain Research, 1999. **822**(1-2): p. 210-9.
271. Palmer, K., et al., *Repeatability and validity of an upper limb and neck discomfort questionnaire: the utility of the standardized Nordic questionnaire.* Occupational Medicine, 1999. **49**(3): p. 171-5.

272. Smith, G., I. Power, and M.J. Cousins, *Acute pain--is there scientific evidence on which to base treatment?* British Journal of Anaesthesia, 1999. **82**(6): p. 817-9.
273. Thompson, J.P., et al., *Nocturnal hypoxaemia and respiratory function after endovascular and conventional abdominal aortic aneurysm repair.* Br J Anaesth, 1999. **82**: p. 129-131.
274. Caranza, R., et al., *Upper airway reflex sensitivity following general anaesthesia for day-case surgery.* Anaesthesia, 2000. **55**(4): p. 367-70.
275. Cousins, M.J., I. Power, and G. Smith, *1996 Labat lecture: pain--a persistent problem.* Regional Anesthesia & Pain Medicine, 2000. **25**(1): p. 6-21.
276. Hashiba, E., et al., *Characterisation and comparison of novel ligands for the nociception/orphanin FQ receptor.* Naunyn Schmiedebergs Arc Pharmacol, 2000. **362**: p. 28-33.
277. Hashimoto, Y., et al., *Antagonistic effects of [Nphe1] nociceptin (1-13)NH2 on nociceptin receptor mediated inhibition of cAMP formation in Chinese hamster ovary cells stably expressing the recombinant human nociceptin receptor.* Neuroscience Letters, 2000. **278**: p. 109-112.
278. Senaratne, M.P., G. Smith, and S.S. Gulamhusein, *Feasibility and safety of early exercise testing using the Bruce protocol after acute myocardial infarction.* Journal of the American College of Cardiology, 2000. **35**(5): p. 1212-20.
279. Sharpe, P. and G. Smith, *Cannabis: Time for scientific evaluation of this ancient remedy?* Anesth Analg, 2000. **90**: p. 237-240.
280. Smith, G., *Scientific journals with editorial independence: an endangered species?* Current Opinion in Anaesthesiology, 2000. **13**: p. 187-190
281. Thompson, J.P. and G. Smith, *Anaesthesia for vascular surgery on the lower limb*, in *Anaesthesia for Vascular Surgery*, J. Bannister and J.A.W. Wildsmith, Editors. 2000, Arnold: London. p. 267-293
282. Buggy, D.J. and G. Smith, *How to write a publication*, in *Conducting research in anasthessia & Intensive care*, A.M. Zbinden and S. Thomson, Editors. 2001, Butterworth Heinemann: Oxford. p. 186-213

283. Habib, A., et al., *Buscopan for the treatment of pain after laparoscopic sterilisation.* Anaesthesia, 2001. **56**(2): p. 174-6.
284. Smith, G., *Publishing changes in 2001.* Br J Anaesth, 2001. **86**: p. 3-4.
285. Smith, G., *Variant CJD: What you need to know at present.* Bulletin of the Royal College of Anaesthetists, 2001. **7**: p. 302-304
286. Smith, G., *BJA Concise – a step too far.* Br J Anaesth, 2001. **87**: p. 171-85
287. Hashiba, E., et al., *Comparison of the binding of [3H]nociceptin/orphanin FQ (1-13)NH2, [3H]nociceptin/orphanin FQ (1-17)OH and [125I] Tyr14 nociceptin/orphaninFQ(1-17)OH to recombinant human and native rat cerebrocortical nociceptin/orphanin FQ receptors.* Neuroscience Letters, 2002. **28**: p. 5-8.
288. Hashiba, E., et al., *Characterisation of the non-peptide nociceptin receptor agonist, RO64-6198 in Chinese hamster ovary cells expressing recombinant human nociceptin receptors.* Life Science, 2002. **70**: p. 1719-1725.
289. Hashimoto, Y., et al., *Effects of chronic nociceptin/orphanin FQ exposure on camp accumulation and receptor density in Chinese hamster ovary cells expressing human nociceptin/orphanin FQ receptors.* Eur J Anaesthesiol, 2002. **449**: p. 17-22
290. Kumar, N. and G. Smith, *Postoperative pain:inpatient*, in *Clinical Pain Management Acute Pain.* , D.J. Rowbotham and P.E. Macintyre, Editors. 2002, Arnold Press. p. 305-328.
291. Ng, A., D.G. Raitt, and G. Smith, *Induction of anesthesia on insertion of a laryngeal mask airway in the prone position for minor surgery.* Anesth Analg, 2002. **94**: p. 1194-1198
292. Ng, A. and G. Smith, *Anesthesia and the gastrointestinal tract.* J Anesth, 2002. **16**: p. 51-64
293. Strong, J., et al., *Treatment outcome in individuals with chronic pain: is the Pain Stages of Change Questionnaire (PSOCQ) a useful tool?* Pain, 2002. **97**(1-2): p. 65-73.
294. Farling, P. and G. Smith, *Anaesthesia for patients with Creutzfeldt-Jakob disease. A practical guide.* Anaesthesia, 2003. **58**(7): p. 627-9.

295. Kitayama, M., et al., *Pharmacological Profile of the Cyclic Nociceptin/Orphanin FQ Analogues c[Cys10,141]N/OFQ (1-14)NH2 and c[Nphel,Cys10,14]N/OFQ(1-14)NH2.* Naunyn-Schmeidebergs Archives of Pharmacology, 2003.
296. Ng, A. and G. Smith, *Use of morphine as the sole analgesic for postoperative pain relief after TAH* Br J Anaesth, 2003. **91**: p. 923
297. Ng, A., et al., *The analgesic effects of parecoxib after total abdominal hysterectomy.* Br J Anaesth, 2003. **90**(3): p. 422P-423P
298. Ng, A., et al., *Early analgesic effects of parecoxib vs ketorolac following laparoscopic sterilization.* Br J Anaesth, 2003. **91**(3): p. 463P
299. Van de Putte, L. and G. Smith, *The role of the editor*, in *How to write a paper*, G.M. Hall, Editor. 2003, BMJ Books: London. p. 99-113.