Indexed as: Gale (Re)

THE DISCIPLINE COMMITTEE OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO

IN THE MATTER OF a Hearing directed
by the Executive Committee of
the College of Physicians and Surgeons of Ontario
pursuant to Section 36(1) of the **Health Professional Procedural Code,**
being Schedule 2 to the Regulated Health Professions Act,
1991, S.O. 1991, c. 18, as amended.

B E T W E E N:

THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO

- and

DR. GEORGE DOUGLAS GALE

PANEL MEMBERS: **DR. P. HORSHAM (CHAIR)**
DR. Y. deBUDA
R. SANDERS

Hearing Dates: June 20, 21, 28, 2001
July 3 – 6, 2001
July 16 – 19, 2001
August 13 –17, 2001
September 17 – 19, 21, 2001
October 10 – 11, 2001

Decision/Released Date: December 3, 2001

On October 10, 2003, the Divisional Court altered some of the Discipline Committee's findings and returned the matter for a new penalty hearing. See College of Physicians & Surgeons (Ontario) v. Gale [2003] O.J. No. 3948.

DECISION AND REASONS FOR DECISION

A hearing was held before the Discipline Committee of the College of Physicians and Surgeons of Ontario at Toronto on June 20, 21, 28, July 3, 4, 5, 6, 16, 17, 18, 19, August 13, 14, 15, 16, 17, September 17, 18, 19, 21, and October 10 and 11, 2001.

THE ALLEGATIONS

Pursuant to the Notice of Hearing, the following allegations of professional misconduct were made against Dr. Gale:

1. That he committed an act of professional misconduct under subsection 1(1)(2) of Ontario Regulation 856/93 made under the *Medicine Act, 1991*, in that he failed to maintain the standard of practice of the profession;

2. That he committed an act of professional misconduct under subsection 1(1)(6) of Ontario Regulation 856/93 made under the *Medicine Act, 1991*, in that he prescribed, dispensed, or sold drugs for an improper purpose;

3. That he is guilty of professional misconduct for conduct or an act relevant to the practice of medicine that, having regard to all the circumstances, would reasonably be regarded by members as disgraceful, dishonourable or unprofessional, which is professional misconduct as defined in subsection 1(1)(33) of Ontario Regulation 856/93;

4. That he is incompetent as defined by subsection 52(1) of the *Code*, in that his care of patients displayed a lack of knowledge, skill or judgment or disregard for the welfare of the patients of a nature or to an extent that demonstrates that he is unfit to continue practice or that his practice should be restricted.

Dr. Gale pleaded not guilty to the allegations set out above.

In his closing submissions, counsel for the College itemized the allegations against Dr Gale as follows:

Dr. Gale failed to maintain the standard of practice of the profession:

1. In his care and treatment of patient 1 who died on May 14, 1998;

On October 10, 2003, the Divisional Court altered some of the Discipline Committee's findings and returned the matter for a new penalty hearing. See College of Physicians & Surgeons (Ontario) v. Gale [2003] O.J. No. 3948.

2. In providing heavy sedation/general anaesthesia to patients (a) 2 (b) 3 (c) 4 (d) 5 (e) 6 and (f) 7 while he administered one or more of the following nerve blocks: (a) stellate ganglion block (b)epidural/caudal block and/or (c) paravertebral block;

3. By treating patient 5 with single shot doses of morphine for her chronic pain;

4. By treating patient 5 with low doses of depomedrol for her chronic pain;

5. In his treatment of patient 6 in giving her high doses of marcaine in the administration of nerve blocks;

6. In his treatment of patient 4 by using the steroid, decadron, for cervical epidurals;

7. In his treatment of patient 7 on February 18, 1997 when he failed to provide in his chart a diagnosis or a differential diagnosis for the complication suffered by the patient on that day;

8. In his treatment of patient 7 on February 10, 1997 in administering nerve blocks under heavy sedation in circumstances where the patient may have been suffering from appendicitis;

9. In his treatment of patient 2 on February 1, 1998 when patient 2 suffered from hypertension after the administration of nerve blocks in that he failed to make a differential diagnosis, he failed to adequately treat the hypertension and he failed to recommend further follow-up;

10. By failing to properly prescribe and monitor the following patients who were receiving opiods. By doing so, he prescribed drugs for an improper purpose:

    (a) For patient 7, a rapid titration of dilaudid despite indications from an addiction specialist, Dr. A, of an addiction problem. In November 1999, Dr. Gale increased the dilaudid doses despite Dr. A's opinion and failed to indicate in the chart the reasons for this;

    (b) For patient 4, a rapid titration of morphine up to 1.6 grams of morphine a day, without appropriate indications or monitoring charted;

(c) For patient 3, a rapid titration of opiods, dilaudid and MS Contin without appropriate indications or monitoring charted. This was done despite concerns raised by the addiction specialist, Dr. A, and behaviour suggesting an addiction problem;

(d) For patient 6 insufficient documentation for the escalation of dosages and switching of narcotics. Further, he prescribed her parenteral Demerol when she was epileptic and suffering from seizures.

11. Dr. Gale is incompetent in that his professional care of his patients displayed a lack of knowledge, skill or judgement or disregard for the welfare of the patients of a nature or to an extent that demonstrates that the member is unfit to continue to practise or that the member's licence should be restricted.

OVERVIEW OF THE ISSUES AND EVIDENCE

After careful review of the evidence, the Discipline Committee has prepared particularly extensive reasons for decision in light of the evidence called over 22 hearing days including 2 experts for the College, 9 defence experts, and over 75 exhibits filed. These reasons are organized to set out the evidence and findings for the 12 issues discussed herein.

Dr. Gale is a certified anaesthetist with extensive experience, having worked as a staff anaesthetist at a teaching hospital in the Toronto area for many years. He held an academic post and was then involved in teaching Residents-in-Training for the speciality of anaesthesia. He had been working at a privately owned medical pain clinic in the Toronto area (hereinafter referred to as the "Pain Clinic") for about 7 years at the time of the incidents at issue.

The Pain Clinic is staffed by several physicians, some of whom are certified anaesthetists, generalists and/or family physicians all engaged in the practice of chronic pain management. Additional staff include psychologists, psychiatrists, and nurses (with various qualifications).

The patients at the Pain Clinic are usually referred for chronic pain management by their family physicians usually after prescribed pain treatment regimes have failed to alleviate their chronic pain. The type of pain treated is defined as Chronic Non-Cancer Pain. The Pain Clinic receives referrals from about 1500 physicians, almost all of whom are from the Greater Toronto Area and a few from the other provinces and the U.S.A.

The general approach to treatment of the chronic pain patients involves initially some investigations (medical and radiological) and psychiatric and psychological assessments (if deemed necessary) in an effort to confirm the cause of the chronic pain. After diagnosis, the patient receives some combination of stronger analgesics and/or narcotic analgesics (e.g. opiates) and/or nerve blocks. Some patients are rejected if the consultant feels that the treatment will not help the patient.

The nerve blocks involve the use of injections of a single drug and/or combinations of local anaesthetics and/or long acting steroids in the paravertebral area, the paraganglionic area and/or epidural areas, (ie:- cervical, lumbar or caudal epidural areas). The frequency of the administration of the nerve blocks varies from daily to several weeks.

At the Pain Clinic, the administration of nerve blocks frequently involves the administration of short acting analgesics or sedatives to patients, allegedly to those who have significant fear of injections. The administration of sedatives/analgesics covers a wide range of dosages from very mild analgesics/sedation (MS) to significant degrees of heavy sedation/general anaesthesia (HS/GA). Each patient is closely monitored by a nurse after the procedure in a recovery room where vital signs and oxygen saturation are measured and documented.

A “step-down” area was mentioned by several witnesses, where patients were further observed after leaving the recovery area. There was no evidence in the documents referred to which would establish the degree of observation and the average length of stay of patients in this step-down area. Even in the patients where difficulties were experienced during recovery, there was no documentation about their activities after leaving the recovery area to suggest that appropriate use was made of a step-down area.

The Pain Clinic came to the notice of the College of Physicians and Surgeons of Ontario via a referral from the Coroner’s office after a Coroner’s investigation into the death of patient 1 There were three physicians directly involved in the care of patient 1: Dr. Gale, Dr. B and Dr. C.

Of the 26 charts reviewed by the College’s expert, Dr. Claire Dionne, there were 6 patients, other than the deceased patient 1, where the expert found significant deficiencies in the practice of

medicine by Dr. Gale which fell below the standard of practice. These six patients were Patients 2, 3, 4, 5, 6 and 7.

Brief clinical details of these patients are described below.

Patient 2 is a 42 year old patient with complaints of (a) severe migraine which began in her teens, (b) cervical whiplash injury sustained from a motor vehicle accident and (c) lumbar spine injury with pain radiating down her left leg.

Patient 3 is a 32 year old patient with complaints of (a) severe headaches and depression, (b) chronic lumbar spinal strain and (c) Grand Mal Seizures.

Patient 4 is a 36 year old patient with a complaint of severe lumbar back pain from an injury he sustained at his job. When he was first seen at the clinic he had spent six months in bed because of this pain.

Patient 5 is a 75 year old female with multiple medical conditions including (a) cervical whiplash injury, (b) degenerative lumbar disc disease, (c) osteoarthritis of both hips and left hip replacement, (d) severe respiratory disease and asthma with clubbing of her fingers, (e) thyroid surgery, (f) tracheostomy with severing of a vocal cord and many environmental allergies.

Patient 6 is a 44 year old patient with several medical problems such as (a) syringomyelia and Arnold Chiari malformation, (b) cervical whiplash injury, (c) chronic post traumatic headaches and (d) lumbar spinal discectomy.

Patient 7 is a 32 year old patient who had chronic headaches and neck injury from a motor vehicle accident which occurred approximately 10 years previously.

Patient 1 was a 32 year old female who sustained a fractured thoracic spine when she was involved in a motor-vehicle-accident two years before her death. After successful orthopedic treatment, she continued to have severe headaches and neck pains. She had begun receiving a series of Nerve Block injections on a weekly or fortnightly frequency. Patient 1 had no past history of general medical problems but during the recovery period after having received some nerve blocks, she died.

EVIDENCE AND FINDINGS

Issue #1: Failed Resuscitation of Patient 1

The Prosecutor for the College itemized the ways in which it is alleged that Dr. Gale fell below the standard of care regarding the treatment of patient 1 as follows:

- failure to recognise that cardiac massage was needed;
- failure to begin cardiac massage earlier;
- failure to question Dr. B about the resuscitation treatment of patient 1;
- failure to actively intervene in the resuscitation of patient 1 to ensure that the correct treatment was being given.

A. The Evidence

There was nothing unusual on the day of patient 1's death until the recovery period after administration of the nerve block injections. As was the custom at this clinic with very many of these patients, patient 1 had received heavy sedation (HS/GA). The sedation was administered by Dr. B and the nerve blocks were administered by Dr. C, a family physician with training in Chronic Pain Management. The practice was that each patient was closely monitored by a nurse until full recovery from the sedation. The nurse recorded the vital signs including the blood pressure and the oxygen saturation about every 5 minutes.

The two physicians involved in the resuscitation of patient 1 were Drs. Gale and B. The defence took the position that Dr. B was the team leader of the resuscitation and that it would have been inappropriate for Dr. Gale to interfere with Dr. B's control of the resuscitation. Dr. Dionne was advised that for a period of time Dr. Gale was known as the Head of Anaesthesia at the Pain Clinic. Several of the physicians who gave evidence agreed that Dr. Gale taught them Pain Management and held a senior post at the Pain Clinic. It was also reported that from time to time Dr. Gale would administer analgesics/anaesthesia for patients undergoing nerve blocks when there was a temporary shortage of anaesthetists at the Pain Clinic.

Dr. B, who was a general practitioner with anaesthetic training, (called a G.P. anaesthetist), was the anaesthetist who sedated patient 1 on the day that she died. He had worked at the Pain Clinic

for about three years as a part-time anaesthetist which consisted of three full days per week. His training in anaesthesia consisted of six months of training in general anaesthesia at a teaching hospital and further practice for another year under supervision. Prior to joining the Pain Clinic, Dr. B had been in practice for several years which included giving anaesthesia mainly for minor procedures. Dr. B testified that he had been shown from time to time how to give nerve blocks by Dr. Gale, but this did not amount to a full training course in pain management.

The events on May 14th, as documented in the nurses' notes on the Anaesthetic Recovery sheet and other supporting documents, showed that shortly after the arrival of patient 1 in the recovery room after her nerve blocks, her blood pressure and pulse suddenly disappeared and became unrecordable. It was also noted that the oxygen saturation had dropped to zero and that patient 1 was taking only a few short breaths.

The nurses' notes indicate that Dr. B and Dr. Gale were both called at the same time. A nurse had placed an oxygen mask on the face of patient 1. Her blood pressure and the pulse were repeatedly checked by the nurse or nurses but the blood pressure, pulse or oxygen saturation never returned to a recordable level. A major issue in this case regarding patient 1's resuscitation, was the repeated reporting by the recording nurse of the absence of a recordable pulse or blood pressure.

The documents show that Dr. B and Dr. Gale were both attending to another patient when they were called. Dr. B immediately came and began to attend to patient 1. A large bore intravenous line was put up and a 500 cc bag of Ringers Lactate was allowed to run in quickly. The appropriate initial resuscitation medications were given twice, including ephedrine, a powerful peripheral vasoconstrictor.

The nurse continued to report the absence of a recordable blood pressure and pulse in the patient. However, Dr. B, during the giving of the drugs, observed the cardiac monitor which was recording a very unusual rhythm and a pulse rate of 40 beats/minute. This was not in keeping with what the nurses were recording. Meanwhile, during the first few minutes of the resuscitation, Dr Gale had arrived at the bedside and proceeded to ventilate the patient (with a bag and mask). Dr. Gale and Dr. B took turns trying to intubate the trachea of patient 1 and after Dr. B succeeded, Dr. Gale continued to bag the patient through the intratracheal tube.

There was an early request by one of the nurses to call the 911 ambulance but she was told not to do so by one of the physicians. The resuscitation procedure continued with Dr. B attending to the giving of drugs and attending to the circulation and Dr. Gale bagging the patient. Dr. Gale reported that he had not felt a pulse at the temporal or carotid areas. However, he continued to bag the patient. Dr. Dionne criticised Dr. Gale for apparently choosing to believe Dr. B's report of the presence of a pulse, despite the fact that he could not detect a temporal or carotid pulse and the repeated reporting by the nurses of no recordings (of blood pressure or pulse). The absence of any oxygen saturation on the monitor (despite adequate ventilation of the lungs) and Dr. Gale's inability to find any pulses at the temporal or carotid areas did not stimulate Dr. Gale to further immediate action.

After delivery of the three shocks, Dr. D, an anaesthetist trained in pain management who works at the Pain Clinic, entered the resuscitation area. She was trained in ACLS, however, she did not take an active role in the resuscitation. She testified that she took a stethoscope and listened to the chest and heart of patient 1. She found that there was adequate ventilation by Dr. Gale but cannot recall if she verbally commented on this to any one. However she found no heart beat and made a comment about not hearing any heart sounds. When she made this comment she was standing between Dr. Gale and Dr. B. She cannot recall if Dr. Gale made any comments but Dr. B responded that he could feel a pulse. This report of no heart beat appears to have had no effect on the on-going activity of the two anaesthetists. Details are lacking as to the specifics of the actions and discussions that took place throughout most of the resuscitation. However some of the exchanges were gleaned from the evidence of Dr. C and Dr. B.

Dr. B and Dr. Gale also chose to follow the machine's instructions to defibrillate the heart of patient 1. The heart did not respond to three defibrillation shocks. After this and some discussion, cardiac massage was commenced at 12:51 p.m. About that time, there was a second request to call a 911 ambulance. Permission was given and the ambulance arrived soon after this and patient 1, accompanied by Dr. C, was transferred to the local hospital where she was pronounced dead.

The Coroner's Report expressed concern that there was a significant delay in beginning cardiac massage on this patient. The Report suggested that this may have contributed to her death.

(i) Expert Evidence of Dr. Dionne

Dr. Claire Dionne was the primary expert witness called by the College. She is a certified anaesthetist and pain management consultant. She had been a member of staff at a Toronto hospital and an Assistant Professor at the University of Toronto. At the time of the hearing, she was transferring to the Winnipeg General Hospital to be Chief Anaesthetist.

Dr. Dionne conducted a review of 26 patient charts, including the charts of the patients noted above, and other documents and she interviewed Dr. Gale, Dr. B and Dr. C.

The allegation of falling below the standard of practice attaches primarily to the failure to begin cardiac massage in a timely manner. Dr. Dionne gave the opinion that the commencement of cardiac massage had been delayed for about 30 to 40 minutes which was a significant delay. Dr. Dionne questioned Dr Gale on this point during her interview of him. She reported that Dr. Gale had correctly recognized the cause of the cardiac arrest and immediate fall in the blood pressure as due to high spinal shock. At the interview, Dr. Gale had correctly described the resuscitation and treatment for this type of shock. However he had also added that he was not in charge of the resuscitation and it was not his patient. Thus it appeared that he left all the decision making up to Dr. B and did not try to influence him to change his decisions or actions when the patient did not respond to the treatment.

Dr. Dionne concluded that Dr. Gale's actions at this resuscitation fell below the standard. It appeared that Dr. Gale recognised the cause of patient 1's condition as high spinal shock and that Dr. B had begun the correct treatment for this condition. However, Dr. B and Dr. Gale both failed to begin immediate cardiac massage when there was no response to the repeat doses of powerful cardiac stimulant drugs and ventilation within the first 10 minutes of beginning the resuscitation on patient 1. Dr. Dionne testified that the basic Cardiac Pulmonary Resuscitation (CPR) rules directed the commencement of cardiac massage.

Dr. Dionne addressed the question about Dr. B reporting the presence of a pulse of 40 beats/minute and Dr. Gale seemingly relying on this. She explained that even with a pulse of 40, some low measurement of blood pressure would have been recorded but there was no recordable

blood pressure in patient 1. Dr. Dionne further stated that Dr. Gale, as the more senior and more experienced anaesthetist, should have taken over the resuscitation from Dr. B. Dr. Dionne added that the fact that there was no blood pressure and there was no trace on the oximeter, definitely puts in doubt Dr. B's belief that there was a pulse and Dr. Gale should have questioned this.

Dr. Dionne further added that the unusual electrocardiogram rhythm (ECG) seen on the monitor was an idiosyncratic rhythm which had no connection to effective cardiac function. Dr. Dionne further described this rhythm as that seen in patients in the terminal stages of life where there is no organised contraction of the ventricles. The patient 1 had all the clinical signs of absent cardiac function and thus cardiac massage should have been immediately started until external cardiac pacing was instituted. Dr. Dionne added that all the conditions for a successful resuscitation were present at the Pain Clinic where two trained anaesthetists (Dr. B and Dr. Gale) were attending, so the calling of 911 was of little consequence since anaesthetists were more qualified to do this type of resuscitation than the paramedics.

Dr. Dionne also pointed out significant fundamental defects in the knowledge of Dr. Gale in the area of cardiac resuscitation which was revealed during the interview. Dr. Dionne also noted that Dr. Gale had not kept up to date with his Advanced Cardiac Life Support certificate.

(ii) Expert Evidence of Dr. Tom Hew

Dr. Hew was called as an expert witness by the College. He is a staff anaesthetist at a Toronto teaching hospital and has been an Associate Professor in the Department of Anaesthesia at the University of Toronto for the last 20 years. He reviewed all of the documents dealing with the death of patient 1 including the Coroner's reports.

Dr. Hew concurred with Dr. Dionne's opinion regarding the delay in initiating cardiac massage. Additionally, he made the following main points in his evidence. His opinion was that if patient 1 had a weak pulse and a barely detectable blood pressure then it was a "near cardiac arrest situation". Therefore, external cardiac massage should have been started immediately. Dr. Hew added that the beginning of the resuscitation was properly done but that there was continuing cardiac inaction for a long period. The anaesthetists, in the absence of a detectable blood pressure or other signs of cardiac output and no response to the initial resuscitative measures,

should have begun cardiac massage. He added that the anaesthetist should not wait until the heart beat stopped but as long as there was no effective circulation, massage should have been started.

On cross-examination, Dr. Hew's evidence remained unshaken. He stressed that if the patient had no effective circulation regardless of the type of ECG rhythm that the monitor was showing, cardiac massage should have been started immediately. When questioned about following an algorithm (shown in one of the CPR protocols) which was followed by Dr. Gale, Dr Hew pointed out that the algorithm only stated the word 'pulse' and did not address the presence of a 'slow pulse'. He noted that the textbook of Cardiology advised that the physician should treat the patient and not the monitor.

When cross-examined about Dr Gale's conduct at the resuscitation of patient 1, Dr. Hew disagreed that it was appropriate for Dr. Gale not to take a more active part or not to take over the resuscitation because Dr. B was the team leader in charge of the resuscitation. Dr. Hew observed that Dr. Gale was already playing an active part in the resuscitation (i.e. intubating and bagging the patient) and was part of the resuscitation team and could have taken over. Dr. Hew testified that in his own practice he had advised the apparent team leader that he/she was not doing resuscitation correctly. Dr. Hew added that he would intervene and take over in some cases.

(iii) The Evidence of Dr. B

Dr. B was called by the College to testify about the failed resuscitation of patient 1. Dr. B testified that when he joined the Pain Clinic staff he was introduced to Dr. Gale as the Head of Anaesthesia at the Pain Clinic. He added that he always considered Dr. Gale in that position as a senior Anaesthetist and thus expected that Dr. Gale should have taken over or strongly advised or challenged him if he thought that Dr. B was making a mistake in the resuscitation of patient 1.

Prior to that day they were both aware of each other's past clinical experience. Though Dr. B had been trained much more recently than Dr. Gale in anaesthesia, Dr. B, just prior to beginning at the Pain Clinic had not given anaesthesia for an eight month period. Dr. B, despite his training in the field, felt that Dr. Gale was his senior colleague. Dr. B knew that Dr. Gale continued to give anaesthesia at the Pain Clinic and was aware of Dr. Gale's past experience at a senior level

in the field of anaesthesia at a teaching hospital and also found Dr. Gale in a position of authority, with his name on the letterhead of the Pain Clinic stationary, when he arrived. Dr. Gale had taught Dr. B to do nerve blocks at the Pain Clinic but did not teach him any anaesthesia.

Dr. B confirmed that he was the team leader at the patient 1's resuscitation and indeed gave most of the orders. He told Dr. Dionne at the interview that he first saw the pulse rate of 40 beats/minute registered on the monitor and then thought that he continued to feel this pulse at her wrist (radial pulse).

Dr. B directed most of the activities at the resuscitation because he had anaesthetised patient 1. Dr. B testified that he and Dr. Gale discussed between themselves some aspects of the treatment and the actions that were occurring at the time of the resuscitation. He testified that he assumed that if Dr. Gale observed activity of the kind that Dr. Gale felt was going to be harmful to the patient, Dr. Gale would say so.

Dr. B agreed on cross-examination that he did not seek or obtain Dr Gale's permission or approval but he operated on the premise that if Dr. Gale saw or was aware of or heard something he did not like, Dr. Gale would raise it with him. When challenged by the defence that he had no clear recollection about a specific consultation with Dr. Gale about the resuscitation, Dr. B replied that during an arrest situation, consultation doesn't really come into practice. He stated that if the doctor gives an order as a member of the team, whether he is the leader or not, and that if people on the team disagreed with the order, they would say so.

This latter fact about verbal exchanges and ongoing discussions between the physicians about treating patient 1 during the resuscitation was confirmed by Dr. C. Dr. C is no longer employed at the Pain Clinic.

(iv) The Evidence of Dr. C

Dr. C was called to testify by the College. Dr. C administered the nerve blocks to patient 1 on the day that she died. He was not involved in the resuscitation of patient 1 but was present in the recovery room at the time of the resuscitation. Dr. C is a certified family physician who had been working at the Pain Clinic for three to four months when the death of patient 1 occurred.

He was not certified in Anaesthesia but did a six week elective training at the Pain Clinic a few months after he completed his certification in family medicine. He was trained at the Pain Clinic to treat chronic pain with narcotic analgesics and nerve blocks.

He described Dr Gale as a senior physician in the Pain Clinic occupying the post just below that of the owner of the clinic and as a consultant and teacher in Pain Management.

His evidence provided more information as to what occurred during the resuscitation of patient 1. He explained that both Dr. B and Dr Gale were taking turns at intubating and bagging patient 1 since they each had difficulty intubating the patient on the first attempt. He testified that they actively assisted each other and discussed the situation as they both continued doing the resuscitation of the patient.

He revealed that neither Drs. B nor Gale recognized the type of heart rhythm on the monitor and they discussed ways of treating it. He drew the rhythm and described the rhythm as an idiosyncratic rhythm. Dr. C testified that both physicians were giving orders about the medications during the resuscitation. He could not recall which one ordered which medication but they appeared to agree until Dr. Gale suggested the use of a drug bertillium. Dr. B replied to Dr. Gale's last suggestion that that drug was not used any more.

(v) Defence Evidence

(a) Evidence of Dr. Gale

Dr. Gale worked at the Pain Clinic for several years after leaving a post at a teaching hospital and as a professor at the University of Toronto. He explained that he had worked in the field for 25 years prior to leaving. He described his working life as being very busy and his skills to be in great demand. He and the owner of the Pain Clinic, Dr. E, are not personal friends but are colleagues and have done some research together. He works for long hours into the late evenings.

Dr. Gale appeared to have an extensive practice with a referral list of 1500 physicians in and around the Toronto area. He did not disagree with the general information given in evidence about his practice and that of the Pain Clinic. However, he emphatically denied occupying any

position of authority at the Pain Clinic and described himself as just a member of a group of physicians at the Pain Clinic. He also denied acting in Dr. E's position when Dr. E was away from the Pain Clinic. His job is simply one of pain management and he is not employed as an anaesthetist although he would help out the other physicians if there was no anaesthetist available.

Responding to the allegations about the failed resuscitation of patient 1, Dr. Gale denied any failure on his behalf. He repeatedly attributed the failure of this resuscitation totally to Dr. B as the team leader. He testified that he had been attending another patient 8, in the recovery room.

He insisted that he went to help Dr. B with the resuscitation but did not assume any position of authority because Dr. B had anaesthetised patient 1 and left her under the care of a nurse in the recovery room.

An important issue was Dr. Gale's apparent inactivity or absence of any precise action expected of a qualified anaesthetist. In essence it was alleged that Dr. Gale did not actively participate in the CPR of the patient and chose to just continue to ventilate the patient.

Dr. Gale said that he chose to believe Dr. B when he said that there was a pulse of 40 beats/minute and thus did not think that CPR should be started since one does not do cardiac massage while there was a pulse which was the sign of a heart beat. However, he admitted that he had felt for a temporal pulse and a carotid pulse after he had intubated patient 1 but did not find any.

On cross-examination, he was unable to say why he believed Dr. B's report of a pulse when all other signs of cardiac arrest were present. He chose to believe that the oxygen saturation monitor was faulty when it did not record any oxygen saturation, while on the other hand he chose to believe the cardiac monitor. He testified that he heard when Dr. D said that the lungs were being adequately ventilated by him but did not hear her when she said that there was no heart beat when she listened to patient 1's chest with a stethoscope. She made the two comments at the same time.

He denied hearing the repeated comment of the nurses about the absence of blood pressure and pulse while he admitted hearing that Dr. B was feeling a pulse of 40 beats /minute. When

challenged, he could not specifically reply why he did not check out the heart beat or the radial pulse himself when there was no apparent response to two doses of cardiac drugs given intravenously. Dr. Gale had no clear explanation for his failure to recognise the idiosyncratic rhythm that was displayed on the ECG monitor and proceeded to agree with the giving of cardiac defibrillation shocks in the absence of other signs of life.

Another very important issue raised by Dr. Gale was that he arrived at the bedside of the patient 1 too late to be of any great assistance. He contended that the recorded time of 12.20 hrs of his arrival at the bedside was wrong and in fact he arrived there at approximately 12.35 hrs instead. However, there were repeated charted statements that the time of his arrival was 12.20 hrs in many of the reports by almost all those present at the time of the resuscitation. In cross-examination, the prosecutor pointed out that this time of arrival did not become an issue to Dr. Gale until a short period before he was to give evidence at the hearing. Dr. Gale explained that the reports which he had written himself stating the time of 12.20 were wrong because he had copied the time from the nurses' report and had continued to reproduce this time until he realised the significance of this fact a few weeks before he gave evidence.

In his defence, Dr. Gale later introduced evidence that he was attending to another patient, Patient 8, who had been anaesthetised by Dr. B and had just undergone nerve blocks. He explained that Dr. B had left patient 8 in his care when Dr. B went to assist at the resuscitation. He suggested that he had to remain at the bedside attending to the needs of patient 8 whom he said was still heavily sedated and had a low blood pressure. Dr. Gale attempted to treat this by ordering a bolus of fluid (5% dextrose) intravenously. He explained that this caused him to arrive at the resuscitation at 12.35 hrs., instead of the 12.20 hrs. It should be noted that patient 8 was in the same recovery room as patient 1 and Dr. Gale was therefore probably no more than 15 feet from the bedside of patient 1 while he was attending to patient 8

Dr. Dionne, in her reply evidence on this point, testified that the time of Dr. Gale's arrival at the resuscitation as between 12:20 or approximately 12:35 did not really matter to her opinion since there was at least 15 minutes left before the cardiac massage was begun. She further pointed out that the 5% dextrose was not the fluid used to increase the blood pressure of any patient and that patient 8's blood pressure was not that low to require any emergency action by Dr. Gale. She

therefore credibly called into question Dr. Gale's suggestion that he had to remain at patient 8's bedside. In addition, most of the patients who had received nerve blocks and heavy sedation at the Pain Clinic were attended by a nurse only and never required a doctor to remain at the bedside.

(b) Defence Experts

Dr. Billings is a certified staff anaesthetist and pain management consultant. He had pain clinics in four hospitals and teaches medical and surgical Residents. He worked as a Fellow under Dr. Gale at the end of his training as an anaesthetist at the teaching hospital.

With reference to the patient 1's resuscitation, he said that it was difficult for him to gather the facts of all that occurred. In his evidence-in-chief, he stated that he would not push the team leader of a resuscitation aside because he had to respect the finding of a trained colleague.

However, responding to a hypothetical situation, Dr. Billings testified that if the nurses did not feel a pulse but the team leader said that there was a pulse and he was doubtful about the presence of a pulse, he would go and feel the pulse for himself. If he did not feel a pulse and there was no blood pressure being recorded, he testified that he would definitely start CPR. On cross-examination, he agreed that the resuscitation was not done properly and did not meet the expected standard.

Nurse Donna Allerton is a qualified ACLS Course Director and instructor and for 4 to 5 years taught this course at McMaster University to physicians, nurses and paramedics.

She testified that if a patient is not responsive, one should call for help, check to see if the patient is breathing, then check for a pulse and if no pulse is found, one should begin CPR. She agreed that if the patient has a pulse, there should be recordable blood pressure. She added that it was Dr. B who was in charge of the patient and thus was the team leader of the code and it was also his patient. Dr. B had also most recently repeated his ACLS certification. She agreed that Dr. Gale was helping with the resuscitation in attending to airway/breathing and the intubated patient and that Dr. B was attending to the circulation of the patient.

When cross-examined, she was challenged about the advice that she would give or what she would do herself if the patient's situation was getting worse. She testified that she would take over the resuscitation while waiting for a more senior physician to arrive. She agreed that she had done this in the past in an Intensive Unit Situation when the medical Resident appeared to be hesitant to begin the CPR because of his inexperience.

Dr. Hans Koritz did private practice in Chronic Pain Management. He had done three years of the residency program in anaesthesia but did not proceed to take the fellowship examination. He had worked at the Pain Clinic from 1990 to 1995 and therefore knew Dr. Gale. He had reviewed the chart of the deceased patient 1. In his cross-examination, he agreed that if the team leader doesn't accept suggestions and the patient continues to deteriorate, the team leader should be replaced.

Dr. E. Thompson is a staff anaesthetist at a teaching hospital and runs a Pain Management Clinic at that hospital. She has done a significant number of resuscitations and kept up to date on her ACLS courses. Dr. Thompson had taken part in numerous resuscitations. She reviewed the chart of patient 1 but could not do an in-depth review of the charts because of time constraints.

In her evidence-in-chief, she testified that she found no significant faults in Dr. Gale's participation in the resuscitation and thought that he did not fall below acceptable standards. When asked if Dr. Gale should have taken over the resuscitation from Dr. B, she replied that it would have been a very unprofessional act to do and an extreme step to take.

However, on cross-examination Dr. Thompson agreed that if there was no measureable blood pressure, that means that there was no circulation. Dr. Thompson later added that she would only take over if the resuscitation was being done by a junior trainee or someone not qualified. Dr. Thompson further stated that she agreed that in the resuscitation somebody should have said 'we need to start chest compressions' a lot earlier. A feeling of the pulse can be problematic while you are shocking the patient because the body is jerking in response to the shocks and she further added that if one is not sure whether the pulse is there or not, one starts chest compressions. She added that someone in that room with ACLS training should have instituted cardiac massage. She further agreed that as soon as it became apparent that this patient had no blood pressure, cardiac massage should have been started.

Dr. Westacott is an anaesthetist and runs a very busy Pain Management Clinic. He was taught by Dr. Gale during his training. Dr. Westacott reviewed the patient 1 file and testified that he found that Dr. Gale had met an adequate standard in what he was doing for the patient. Dr. Gale looked after the airway/breathing part of the resuscitation and this was adequately done. He stated an opinion that it was reasonable for Dr. Gale to rely on the information given by Dr. B, the team leader.

However, on cross-examination Dr. Westacott replied that if there is an adequate peripheral pulse, there should be no CPR, and he added that if there was no circulation, the medications given (into the vein) would stay with the venous system and would not be returned to the heart.

B. Findings

After a thorough review of the evidence, the Discipline Committee finds that Dr. Gale failed to maintain the standard of practice of the profession in his care and treatment of patient 1 as a member of the resuscitation team during the failed resuscitation on May 14, 1998.

In particular, the Discipline Committee finds that there was an unreasonable delay in the commencement of cardiac massage and that, in the circumstances, Dr. Gale ought to have taken steps to commence cardiac massage or to advise Dr. B to do so earlier. Further, the Discipline Committee finds that Dr. Gale had an obligation as a qualified member of the team conducting the resuscitation to intervene in the circumstances of this case where the team leader was failing to take adequate steps and the patient's condition was deteriorating.

These findings are based upon the Discipline Committee's acceptance of the evidence on this issue from Drs. Dionne, Hew, B and C as well as evidence given under cross-examination by defence witnesses Drs. Billings, Koritz, Thompson, and Westacott and Nurse Allerton.

By way of summary, the Discipline Committee makes these findings with particular reference to the following matters which were established in the evidence:

(i) There was a significant delay in commencing cardiac massage in circumstances where there were sufficient indicators to make it clear that cardiac massage should have been commenced;

(ii) There was substantial agreement among the experts that in circumstances where patient 1 had a weak pulse and a barely detectable blood pressure, a 'near cardiac arrest' situation existed and cardiac massage should have been started immediately;

(iii) A significant number of the expert witnesses testified that a team member should take over a resuscitation from the team leader where the resuscitation was failing as in the circumstances of this case. Some of the experts had themselves taken over during a failing resuscitation.

(iv) Dr. Gale was a senior anaesthetist and was knowledgeable and capable of questioning or advising Dr. B on the difficulties which arose during the resuscitation. He failed to do so.

Issue #2: Use of Heavy Sedation During Nerve Blocks

A. The Evidence

(i) Evidence of Dr. Dionne

The second issue dealt with whether it fell below the standard of practice to use heavy sedation/general anaesthesia (HS/GA) for the administration of nerve blocks involving the patients referred to above.

Dr. Dionne described the use of the various blocks which are accepted by most of the practitioners in the field. These were stellate ganglion block (SGB), epidural block (cervical, lumbar and caudal) called Neuraxial Blocks and paravertebral blocks (PVB). There were other nerve blocks administered by Dr. Gale and their use was controversial e.g. spinal accessory block (SAB), zygomatico temporal block (ZTB) and the trans-scapula blocks (TSB).

Dr. Dionne explained the fundamental aspects of the nerve blocks in the relief of chronic non-cancer pain. Essentially, the area immediately around the nerve root or nerve ganglion was injected with a local anaesthetic. This injection affected the nerves by stopping the transmission of painful stimuli to the spinal cord thereby eliminating the sensation of pain. This effect lasted for varying periods of time.

The measure of the effectiveness of the block was a subjective measure by the patient who reported the positive effects to the treating physician. By using specific clinical and behavioural criteria and repetitive assessment through in-depth interview, the physician would be able to document the therapeutic effect of the blocks. Usually, if the patient had no significant response to these blocks by the third or fourth treatment, the treatment was considered ineffective and discontinued.

One of the most contentious issues in the hearing was the extensive use of heavy degrees of sedation to prevent pain and/or anxiety during the administration of the nerve blocks. Dr. Dionne gave very strong and compelling reasons why little or no sedation should be used in these patients and presented as exhibits a great deal of the research literature and her widespread experience to demonstrate the normal standard of practice for this procedure. The extensive use of HS/GA by Dr. Gale was well demonstrated in the files presented as exhibits and in Dr. Gale's day books.

Dr. Dionne emphatically stated that in administration of the SGB, the PVB and the Neuraxial blocks, either very light or no sedation was needed. The reason was that sedation was not necessary and, most important of all, a conscious patient will be able to warn the physician of the very early signs of serious complications of the nerve block injections. These complications involve traumatic effects on the nerves themselves by the injection of the anaesthetic too close to or into the nerve itself or into the spinal fluid or into the blood vessels that are nearby. The significant effects range from simple paraesthesia that lasts a few hours to generalised seizure and collapse of the patient from spinal shock.

On cross-examination on this point, Dr. Dionne was challenged that the literature did not expressly say that HS/GA was specifically prohibited in nerve block administration. Dr. Dionne demonstrated that the articles dealing with nerve block administration did not address heavy sedation or general anaesthesia in this area because it was not used. Dr. Dionne added that there was only a mention of the use of a mild sedative for patients who suffered from needle phobia or marked anxiety. On the other hand, she pointed out that almost all of the articles mentioned the important need to have an alert patient who can warn the physician about very early complications.

(ii) Defence Evidence

Dr. Gale argued that he used his clinical judgement to decide which patients needed the HS/GA and excused the increased frequency of HS/GA by saying that it was the more severely affected chronic pain patients who were referred to his clinic. Dr Gale continued this line of response when it was pointed out that in almost 100% of the 26 charts reviewed by Dr Dionne, the patient had received HS/GA. Another argument put forward by the defence was the absence of the specific prohibition against HS/GA in most of the articles on nerve blocks.

Dr Billings had administered over 500 or more SGB in his clinic. He testified that it is the simplest block to do and he agreed with Dr. Dionne that HS/GA was not needed for the SGB. He added that in over 90% of the SGB that he had administered, he used no sedation. He continued that the possibility of complications can arise whether the patient is sedated or not sedated and that the risks are always there.

Dr. Westacott sees about 20 to 25 patients per week for pain management and administers an average of 100 to 125 nerve blocks per week. He could not recall sedating any of his patients for SGB, PVB, or Neuraxial blocks. He added that he was taught that it was preferable to do these blocks with the patient awake or only lightly sedated. He testified that he maintained verbal communication with his patients during the blocks and, in general, it is considered better and with a lower risk if they are done awake rather than under a general anaesthetic.

Dr. Thompson ran a clinic very similar to Dr. Gale but not as big. She saw about 25 patients a day and half of these received nerve blocks. She agreed that the topic of the use of HS/GA was not specifically addressed in the literature but was indirectly referred to by the mention only of the use of light sedation for the anxious patient. Dr. Thompson gave the opinion that Dr Gale's practice generally fell within a reasonable standard of practice. However, she pointed out that some of the articles dealing with general anaesthesia and epidurals really dealt with patients who were anaesthetised for a planned surgical procedure and did not apply to chronic pain patients.

On cross-examination, Dr Thompson stated that she did not have much time to do an in-depth review of the patients' charts so she did a limited review. Dr. Thompson also testified that at the

teaching hospital where she practised, no HS/GA is given for nerve blocks. She agreed with the need frequently expressed to keep in constant verbal contact with the patients receiving nerve blocks so that they may alert the physician to problems.

Dr. Buckley is an anaesthetist who runs a Chronic pain management clinic as a solo practitioner. He reviewed 7 files of Dr Gale's patients and other relevant reports. He testified in chief that, in general, Dr. Gale's practice met a reasonable standard of practice and that he was not incompetent.

The panel noted that Dr. Buckley was a friend or close acquaintance of Dr. Gale, several times referring to him as 'George', and admitted to having visited the Pain Clinic in the past with a view to applying for a job there. The panel therefore gave Dr. Buckley's evidence less weight.

He added that Dr Gale's practice had a unique brand of patients in that the Pain Clinic was the place of last resort for chronic pain patients. He suggested that this might cause the appearance of increased use of certain modalities because the patients seen by Dr. Gale were pre-selected.

Although he did not specifically address the practice of the giving of HS/GA for nerve blocks, he admitted that it was better to have the patient awake to warn about potential complications. When specifically challenged, he admitted that it was not his usual practice to use HS/GA for nerve blocks.

On cross-examination, he admitted that his review of the 7 charts was not too in-depth because of time constraints.

B. Findings

Based on the evidence, the Discipline Committee finds that Dr. Gale failed to maintain the standard of practice of the profession in the provision of heavy sedation/general anaesthesia to the patients referred to above for administration of nerve blocks.

Dr. Dionne and the defence experts agreed that stellate ganglion, epidural/caudal and paravertebral blocks could be done without HS/GA. Further, they agreed that it was preferable to do these blocks without HS/GA so that the patient would be awake and able to tell the physician of early signs of complications. A patient under HS/GA is at a greater risk of

complications because of the inability to inform the physician of developing problems, as probably occurred in patient 1.

The panel also notes that the defence experts did not do these nerve blocks under HS/GA in their practices although some stated that there might be limited circumstances which warrant HS/GA such as for paediatric patients, surgical procedures or the infrequent case of extreme needlephobia. The Discipline Committee is not satisfied that the use of HS/GA by Dr. Gale for the administration of these nerve blocks is justified. His Day Books show extensive use of HS/GA for nerve blocks. Further, it is clear that he readily provided HS/GA to his patients very early in their treatment and there are no clinical indications noted which supported the need for this. The Discipline Committee does not accept Dr. Gale's evidence that the patients at issue were so extremely needlephobic that HS/GA was the only way to administer nerve blocks.

Issue #3: Single Shot Morphine via Caudal Epidural to Patient 5

A. The Evidence

In her review of the patient's charts, Dr. Dionne found that Dr. Gale had administered single low doses of morphine (1 mg, 1.5 mgs, and 3 mgs) over a period of about 8 months via a caudal epidural to this 75 year old patient whom he was treating for chronic pain. Of concern was the use of high doses of drugs given for heavy sedation to this woman prior to doing the epidural procedure to administer a very low dose of morphine, thought to be of little use to the patient. This patient was already receiving orally high doses of opiods as part of the treatment plan.

Dr. Dionne testified that these low doses given as a single shot were useless and never used for treating chronic pain and additionally when given at the 3 mg dose via an epidural, it had the potential for causing respiratory suppression up to 12 hours after it is administered. Dr. Dionne stated that epidural single low dose morphine was almost exclusively used as a trial dose after the epidural is set up and before a catheter is threaded into the epidural space for continuous infusion of morphine to determine effectiveness. This is used for procedures when prolonged pain suppression is needed. An example of this is a woman during child birth or prolonged surgical procedures.

Dr. Gale in cross-examination explained that he had not seen respiratory depression as a complication of the epidural morphine at the low dose used in patient 5. He added that the respiratory depression was based on the drug given via lumbar epidural not caudal epidural as he did in patient 5. He added that he had given it in combination with other drugs on board (i.e. marcaine and steroids) thus it was difficult to say if it was effective. Dr. Gale then said that he had discontinued the practice since he saw no benefit from this low dose of morphine.

When challenged about the possibility of respiratory depression from the morphine given epidurally and patients being discharged home after 15 minutes, he explained that they can go to the step-down unit but would leave of their own accord. He argued that one cannot force patients to stay if they do not want to, but again he could not demonstrate to the panel the length or nature of observation done on these patients.

Dr. Billings testified that he never used this low dose in his chronic pain patients. He added that he had not been taught to use it in this area. Additionally, he explained that in opium naïve patients such a low dose may have some effect because the body has not acquired any tolerance to the drug. He agreed with Dr. Dionne's suggested use of this prior to setting up a continuous infusion for surgical patients. He commented on the possibility of respiratory depression at a slightly higher dose which usually occurs 15 to 18 hours after administered. He added that this could have occurred earlier in this woman who had other signs of chronic respiratory problems in addition to her age.

Dr. Buckley testified in-chief that he did not think that use of single shot morphine breached the standard of practice to administer such a dose. However, he has never used such a low dose as a single shot and did not recommend it to his colleagues. On cross-examination, he said that this practice was statistically unusual. When further challenged, he agreed about the risk of respiratory complications, especially in a patient such as patient 5 who already had chronic respiratory problems. He added that if he used higher doses epidurally, his patients were surgical patients and were almost always in hospital overnight and thus closely monitored.

Dr. Thompson testified that she did not offer single shot morphine to her chronic pain patients and rarely used it. On cross-examination, she added that she had used it as single doses only to test its effect before a continuous infusion for surgery. She also agreed that the weekly repeated

single shot of low dose morphine should not be used by a prudent physician and added that the discharging of the 75 year old after an epidural morphine was not prudent.

Dr. Westacott does not use single dose epidural morphine in his chronic pain patients.

On cross-examination, Dr Koritz testified that the issue of the use of single dose morphine depends on the dose used. He added that 3 mgs would act as an adjuvant and thus would not be effective on its own. He did not expand on this fact nor provide data to support this claim.

B. Findings

The Discipline Committee finds that Dr. Gale failed to maintain the standard of practice of the profession by treating patient 5 with single shot doses of morphine for her chronic pain.

The Discipline Committee accepts the evidence of Dr. Dionne on this issue. The Discipline Committee is also persuaded that this is neither a standard nor a prudent practice based on the evidence given in cross-examination by the defence experts, particularly in that these defence experts did not use single shots of morphine and recognized the risk of respiratory depression in this patient.

Issue #4: Administration of Low Dose Depomedrol

A. The Evidence

Dr. Gale had administered very low doses of depomedrol to patient 5. Doses of 5 mg, 10 mg, and 20 mg were given via caudal epidural as part of the pain treatment and it was noted that this patient had degenerative disc disease, osteoarthritic changes and lumbar pain. The normal therapeutic doses used in the treatment of chronic pain by the experts was a minimum dose of 80 mg as a starting dose.

Dr. Dionne explained that the depo-variety of the steroid was used since it stayed at the injection site for 2 to 6 weeks for the best long term effect. Various dosage regimes were used but never were the doses used as low as 20 mg. A common regime was 80 mg every 2 to 6 weeks. Dr. Dionne questioned about the possible risk of adrenal suppression by these frequent small doses.

Dr. Gale disagreed that the dose was sub-therapeutic. However, he added that he had since discontinued using this because he found them ineffective especially when given via caudal epidural. He further explained that he just did not go to the text book and choose the dose recommended but he used the dose that he thinks can be effective. Again he said that he used his clinical judgment and denied that there was any real research available to demonstrate the side effect of adrenal suppression although the medical text had warned against this practice.

Dr. Billings uses the dose of 240 mgs and then gives 40 to 80 mgs within the following three weeks. He thinks that adrenal suppression occurs with doses of 150 mgs but was not very sure about this. On cross-examination, he replied that the doses of 5 mg, 10 mg or 20 mg epidurally could not do any good to the patient but it would not hurt the patient either.

Dr. Buckley testified that the doses of caudal epidural depomedrol that he used were 120 mg initially followed by 2 doses of 80 mg each 2 to 6 weeks apart. When cross examined about the low doses that Dr. Gale used, he replied that he knows of no study that had been done to say what is the effective dose. He added that there was very little downside to these low doses (except that they might not work) and that suppression of the adrenals has not been documented. He agreed that he had a broader view of standard of practice than Dr. Dionne.

Dr. Thompson in her examination-in-chief was only asked about the use of steroids for treatment of her patients and replied that it fell within a reasonable standard of practice. However, it was noted by the panel that this was only a general question since no dose or type of steroid was quoted.

On cross-examination, Dr. Thompson expressed surprise at the low dose of depomedrol used by Dr. Gale. She added that most often large doses, large amounts of depomedrol and large volumes of local anaesthetic are given for a limited number of occasions. She uses larger doses of depomedrol in her patients in a series of three injections. She added that if one finds that a lower dose works, she is not against them using a lower dose.

Dr. Koritz testified in cross-examination that he used the epidural depomedrol at doses of 80 mgs as a starting dose and then gave follow-up doses of 3 to 5 doses of 10 to 20 mgs.

B. Findings

The Discipline Committee finds that Dr. Gale failed to maintain the standard of practice of the profession by treating patient 5 with lose doses of depomedrol for her chronic pain.

The Discipline Committee accepts the evidence of Dr. Dionne on this issue that the doses administered by Dr. Gale were far below normal therapeutic doses and would not do the patient any good. This view was accepted by some of the defence experts also, particularly by Dr. Billings.

The problem with administration of such a sub-therapeutic dose is compounded by the fact that Dr. Gale was giving either light sedation or heavy sedation to patient 5 in order to administer these low doses of depomedrol to her.

Issue #5: Administration of High Dose and Volume of Marcaine

A. The Evidence

Dr. Dionne testified that patient 6 received daily blocks or every other day blocks for a period of time. Dr. Dionne was concerned about the volume of and the total dose of marcaine given. Normal maximal dose is not more than 2.5 mg/kilogram weight and it appears that the dose she received, especially the documented dose given on the 22nd of October, was in the toxic range. The sheer volume of fluids containing the drugs caused her some concern.

Patient 6 had received 70 cc of marcaine on the 12th October, 60 cc of .375% marcaine plus 10 cc of 0.5% on the 20th October 0.8%, and then received 10 cc of 0.6% lidocaine. On the 12th, 20th, 22nd and 25th of October, she had further hefty doses. On the 22nd of October, Dr. Gale used 70 ccs of 0.735% which was a toxic dose.

The total toxic dose that she received was calculated at 262 mgs. The patient 6 weighed 67 kg and the maximum recommended dose is 2 to 2.5 mgs per kilogram which will give a maximum dose of 134 to 167.5 mgs. It was pointed out that the dose received was approximately double this dose. Dr. Dionne raised the question about the frequency of injecting this large volume of fluid and high dose of a local anaesthetic into the epidural space for nerve block therapy. She suggested that most likely the treatment was ineffective since the patient was treated every two to three days with fairly high doses of marcaine.

Dr. Gale testified that the doses listed may not be the final total dose given since the marcaine was titrated for effect. This answer is questionable because if the patient had received HS/GA for the procedure (which caused deep sleep or mild coma), what criteria did Dr. Gale use to decide when the best effective titrated dose had been given?

B. Findings

The Discipline Committee finds that Dr. Gale failed to maintain the standard of practice of the profession by administering high doses of marcaine to patient 6.

The Discipline Committee accepts the evidence of Dr. Dionne that the dose of marcaine given to patient 6 was excessive based on her weight and was a dose in the toxic range. The Discipline Committee cannot accept Dr. Gale's explanation as an excessive dose should not be prescribed notwithstanding intended titration. Further, Dr. Gale could not have gauged the titration in a patient under heavy sedation.

Issue #6: Use of the Steroid Decadron for Epidural Injection

A. The Evidence

Dr. Dionne found that in patient 4, Dr Gale had used decadron which is a soluble steroid which gets absorbed quickly and thus has no local effect. She emphasised that it's the wrong drug to give and there has never been a recommendation to give these soluble drugs into the epidural space. Dr. Gale gave 1 mg of decadron on the 20th and 27th, April and on the 4th of May via cervical epidural. Dr. Dionne added that the dose is not unsafe but it is completely ineffective at this low dosage.

Under cross-examination, Dr. Gale would not say that the decadron was ineffective. He testified that he did not know if it was less effective than depomedrol, but he had stopped using depomedrol because at a recent meeting in Boston, it was reported that there were damages to the nerves from the granular matter contained in the injection itself. It was noted that this latter fact was not mentioned by any of the chronic pain specialists at this hearing. Dr. Gale presented no concrete evidence to support this contention.

Dr. Thompson agreed with the evidence of Dr. Dionne that decadron was a soluble steroid and was not used in these patients because it did not stay at the site of injection for the desired effect. She added that the depomedrol was specifically used for this reason. She denied ever using decadron in her chronic pain treatment.

B. Findings

The Discipline Committee accepted Dr. Dionne's evidence that Dr. Gale failed to maintain the standard of practice of the profession. The defence did not offer any evidence to challenge Dr. Dionne's contention. There was no doubt that the drug decadron should not be used because of its unique properties not suited for use in these pain management injections.

Issue #7: Treatment of Patient 7 on February 18th, 1997

A. The Evidence

Dr. Dionne testified that Dr. Gale failed to provide in the patient's chart a diagnosis or differential diagnosis for a complication patient 7 suffered on February 18, 1997. The patient was having a series of nerve blocks under HS/GA, and during the recovery period he became restless, thrashing about, responsive to voice, with tachycardia (rapid heart rate) and tachypnoea (rapid breathing). The airway was patent.

Dr. Gale was called. The blood pressure was 130/80. Dr. Gale gave 3 mgs of midazolam intravenously and dilaudid (a morphine drug) intramuscularly.

Dr. Dionne explained that there are several possible causes for this type of behaviour in this situation but she found no notes (history and physical examination) in the patient's chart. Dr. Gale also gave no reasons for the added medications he administered. The brief notes of that day just stated that the patient had nerve blocks but they did not specify if it was before or after this attack.

Dr. Gale explained that he had recognized that it was cerebral excitation as the cause of patient 7's symptoms. Dr. Gale added that patient 7 was probably suffering a side effect of the bupricane. Dr. Gale added that this was not an incredibly rare complication. He added that he

thought it to be a minor problem and easily treated, but did not see the need to write about it in the chart.

B. Findings

The Discipline Committee finds that Dr. Gale failed to maintain the standard of practice of the profession in his treatment of patient 7 on February 18th, 1997 by failing to provide diagnosis/differential diagnosis.

The Discipline Committee accepts the evidence of Dr. Dionne on this issue. The behaviour of patient 7 described above was potentially serious. Dr. Gale should have made note of the behaviour and recorded his diagnosis or differential diagnosis as there can be many more serious, acute causes of this attack.

Issue #8: Treatment of Patient 7 on February 10th, 1997

A. The Evidence

Dr. Dionne described the treatment of patient 7 with nerve blocks despite the possible presence of a physical illness. The notes in his chart on the 10th February, 1997 showed that patient 7 was seen and briefly examined by Dr. Gale. The note stated that patient 7 had "vomited since two nights, and had diarrhoea; never had appendicitis." The note went on to state 'differential diagnosis - gastroenteritis or acute appendicitis'. Below there was another notation stating "headaches, 8 to 9 out of 10." On that date it appears that Dr. Gale proceeded to do the nerve block and gave the dilaudid. From the record it was apparent that Dr. Gale heavily sedated patient 7 for the nerve blocks despite suspicion of a physical illness.

Dr. Dionne testified that although proper procedure would have been to send the patient for assessment at the local hospital or allow a longer period of observation, Dr. Gale proceeded with the nerve blocks. He did not even take the added precaution of protecting the airway with an endotracheal tube in the event of the patient vomiting while under HS/GA.

To summarise, she concluded that Dr. Gale had:

a. ignored the need for an acute assessment of the patient's physical illness;

b. proceeded to give the nerve blocks without having ruled out a serious physical illness;

c. recklessly administered deep sedation/general anaesthetic without properly protecting the airway of a patient who had been vomiting.

Dr. Gale agreed that there were no detailed notes nor a list of differential diagnosis for 10th February when the patient had a complaint of headache, vomiting and diarrhoea. Dr Gale replied that he had examined the patient and ruled out appendicitis. However, he could not explain why he continued to write in his brief note the notation "??acute appendix" when he says that he had ruled it out.

B. Findings

The Discipline Committee finds that Dr. Gale failed to maintain the standard of practice of the profession in his treatment of patient 7 on February 10th, 1997. In so finding, the Discipline Committee accepts the evidence of Dr. Dionne given at the hearing and summarized above.

Issue # 9: Treated Patient 2 for a Post Nerve Block Complication of Hypertension

A. The Evidence

Patient 2 had developed high blood pressure after the administration of nerve blocks. Dr. Dionne testified that Dr. Gale had partially treated this by injecting some sedatives and then discharged the patient without the blood pressure returning to its normal pre-sedation level. There was no indication in the chart that he had done a full assessment of this patient to rule out other differential diagnoses prior to discharging her nor was there any note to say that he had discussed the significance of this with the patient. Dr. Gale also did not arrange or advise the patient about appropriate medical follow-up for this new condition.

In his defence, Dr. Gale explained that he had known the patient for many years and was sure that she would have followed up with her family doctor in the near future. He admitted that he did not specifically advise the patient to see her doctor as soon as possible. He offered no explanation for the lack of a better assessment of this patient and the significant complication.

B. Findings

The Discipline Committee finds that Dr. Gale failed to maintain the standard of practice of the profession in his treatment of patient 2 as set out above. The Committee accepted that Dr. Gale's treatment of this acute attack of hypertension left much to be desired, particularly since there are many other causes that should have been ruled out. There was no defence opinion offered which justified Dr. Gale's conduct. The Committee accepts the opinion provided by Dr. Dionne on this issue.

Issue #10: Prescribed Drugs for an Improper Purpose

A. The Evidence

Dr. Dionne testified that the manner in which Dr. Gale administered the high doses of oral opiods for several of the patients reviewed fell below the acceptable standard. She stated that at the time that these allegations arose there were a few published guidelines or standards in other areas of Canada and the USA addressing the administration of these opiods.

Evidence demonstrated the following points with regard to Dr. Gale's practice in the use of these high dose opiods which she said were not acceptable in the practice of a prudent practitioner in this field. These points were found in one or two or all of the four patients:

(a) rapid escalation of the doses of the opiods over a short period of time without proper acceptable documentation of the effect of the doses and the reasons for the increases.

(b) lack of documentation of the clinical reasons why they were receiving these high doses of these opiods at the same time that they were being given very frequent nerve blocks.

(c) lack of documentation to explain why they were also receiving frequent high doses of sedation at levels to cause HS/GA for the frequent administration of the nerve blocks.

(d) absence of consideration of the advice given to him by Addiction Experts whom he had consulted about the possible presence in the patient already addicted or beginning to develop a physical dependency to the opiods.

(e) absence of explanation in the chart and any indication that he informed the patient why he persisted in increasing the doses of the opiods when it was apparent that the patient or patients were not responding to the rapidly increasing doses of the drug.

A specific example was noted in the case of patient 7, a 32 year old, where there was rapid escalation of doses and an observation noted in the chart that patient 7 gave a history of physical addiction to the drugs. The note added that when he did not take them he experienced withdrawal symptoms. Additionally, this patient was seen by an addiction specialist, Dr A, who recognised this situation. However it is noted that Dr. Gale ignored the advice from this specialist and increased his opiod medications. He also did not note the reasons for this action.

Another example was seen in the chart of patient 4 who was a 36 year old labourer with lumbar back pain, secondary to lifting, pulling and twisting on an assembly line. His doses were increased from a dose of 464 mgs to a total of 1260 mgs/day over a period of 12 months. There were no significant notes or indications or monitoring in his chart for the increase. Dr. Dionne noted that there were signs in his life style that would increase the possibility of development of addiction since patient 4 smoked a pack of cigarettes/day and had used marijuana in the past.

Another example was demonstrated in the treatment of patient 3, a 32 year old, who was given rapidly increasing doses of opiods without proper indications in his chart. Again the addiction specialist, Dr. A, had raised a concern about this patient. His behaviour also suggested a developing addiction which was not acted upon by Dr.Gale. Much later, Dr. Gale rapidly cut off a large part of the dose of his opiod medication without proper notation of reasons in the chart.

Another example was seen in the treatment of patient 6, a 44 year old, who was taking 500 mgs to 600 mgs of Demerol per day initially recommended by a Dr. F. Dr. Gale continued this Demerol given by injection to the patient at home. During this period this patient was also

receiving very frequent nerve blocks. These nerve blocks were given sometimes 1 or 2 or 3 or 4 days apart. Patient 6 also received HS/GA for administration of some of these blocks.

The complexity of this chronic pain management, where three modalities of heavy drug administration were being used, was not clearly documented or tabulated in patient 6's chart. Her husband had complained about her severe sedated state complaining that she could not be left alone and had to be escorted everywhere at home to avoid her hurting herself. A side effect of the Demerol was seizures and Dr. Dionne noted that Demerol should not have been administered at home to a patient who has epilepsy, a seizure disorder.

The use of high doses of opiods is not the issue in this case. Dr. Dionne testified that it was the consensus of practitioners in the field and, with her wide experience, she confirmed that proper practice demanded closely documented monitoring of the patient and clearly stated reasons why the doses were being augmented. Here, there was no documentation of the activities of daily living or physical functioning noted in the charts to explain the reasons for the increase in the opiod doses.

Dr. Gale testified that he used his clinical judgement in deciding the need for the increasing doses. He emphatically denied that there were standards of practice in this field. There was one instance when he wrote a letter seeking the opinion of his senior colleague at the Pain Clinic (Dr. E) about the non-response of a patient to the treatment that he was giving. At one point, Dr. Gale had expressed the opinion that the choice of creation of a drug addict and the effective treatment of chronic pain is a risk that one had to take.

Dr. Watson, a neurologist who treated chronic pain patients by pharmacological means, without the use of nerve blocks, appeared to support the practice of Dr. Gale. Dr. Watson said that he had done an in-depth review of all the charts and found that Dr. Gale's standard of practice was in almost all cases above the acceptable standard of practice. He criticised Dr. Dionne's report saying that she did not commend Dr. Gale's good practice nor praise the work that Dr. Gale did.

However, when challenged on cross-examination, it was revealed that the in-depth review was not that thorough in that he did not notice certain significant facts. Dr. Watson failed to document the frequencies and the escalation of doses of the opiods in his report although he

emphatically stated that the escalation was within acceptable practice. Dr. Watson had omitted to bring his copy of his report to the hearing. He also omitted to note in a significant number of charts unsigned and incomplete consent forms for the HS/GA and/or nerve blocks. Dr. Watson had never referred any of his patients for further treatment to any physicians at the Pain Clinic although he knew of its existence.

Dr. Watson also had great difficulty in defining what he meant by the standard of practice. He eventually agreed that there were acceptable known guidelines by others practising in the field.

Further questioning revealed that in his practice for many years he had been following most of the list of guidelines (i.e. function in a family, do their house work, laundry and shopping) which had only been recently published in a document on Evidence Based Recommendations in Treatment of Chronic Pain, by the CPSO. He further agreed that these guidelines would in fact have been followed by a prudent physician in the field.

He additionally agreed that in the case of patient 3, rapid escalation of the doses is a concern but hesitated when pressed saying that he did not really know what 'rapid' means in this context. He added however that he had no concerns in patient 2's case about rapidly dropping his dose of opiods in that once the final dose is about 25% of the original dose, the patient should not get signs of withdrawal. He agreed that there is some concern about the rapid escalation of doses in patient 7 and that he seemed to be taking more than the doctor thought that he was taking.

Dr. Buckley commented on the high doses of opiods used and added that doses as high as 300 mgs a day is somewhat unusual but that there are other issues to attend to in the treatment of these patients. He did not elaborate on this comment.

Dr. Thompson testified that there are wide varieties in the dosages of opiods in all patients and the only way to decide was to listen to the patient about the effect on their daily lives. She agreed to the use of increasing doses as long as there are no side effects. She also confirmed that it was acceptable practice to rotate and switch the opiods to get the best therapeutic effect.

B. Findings

The Discipline Committee finds that Dr. Gale prescribed drugs for an improper purpose in that there are inadequate indications for the escalation of doses in the patients referred to above and that he fell below the standard of practice for failing to adequately record and monitor the effect of the increased doses. The members of the Committee were also very concerned with the almost total absence in the charts of the body weight which is necessary for the calculation of dosage for most of the drugs.

Dr. Gale's mere assertion that he exercised good clinical judgment is not an adequate substitute for proper monitoring and recording for such high doses of opiods.

Further, the Discipline Committee paid close attention to the evidence given by the defence expert, Dr. Watson, and took note of the comments of the other defence witnesses and found that they essentially agreed with the evidence of Dr. Dionne.

The Committee was assisted by the general guidelines or standards followed by the defence experts who have practised for several years in the field. It is noted that these guidelines or standards co-relate closely with the recent guidelines from the CPSO.

Issue #11: Incompetence

The Discipline Committee finds that Dr. Gale is incompetent in that his professional care of his patients displayed a lack of knowledge, skill or judgment or disregard for the welfare of the patients of a nature or to an extent that demonstrates that the member is unfit to continue to practise or that the member's practice should be restricted.

In particular, the Discipline Committee finds that Dr. Gale was incompetent in his conduct during the resuscitation on the basis that he failed to exercise the necessary knowledge and skill required in the timely intervention in the resuscitation of a patient. This knowledge and skill is specific to his specialty and is knowledge and skill necessary in his present practice in the pain management field.

Further, his disregard for the welfare of his patients is very evident throughout the many substandard practices in his choice of medical intervention referred to above. His medical

interventions show that he lacks empathy for his patients and, on many occasions, placed his patients at unnecessary risk through his interventions.

Issue #12: Disgraceful, Dishonourable, Unprofessional Conduct

Based on all of the evidence referred to herein, the Discipline Committee also finds that Dr. Gale's conduct would reasonably be regarded by members as disgraceful, dishonourable or unprofessional as alleged in the Notice of Hearing.

SUMMARY

In summary, the Discipline Committee is satisfied that the allegations herein have been proved on a balance of probabilities based on clear, convincing and cogent evidence. In many cases, the evidence of Dr. Dionne (which was accepted by the Committee) was supported by the defence experts when they were challenged on cross-examination. Further, in some cases, the defence experts were considered to be less impartial because of their relationship with Dr. Gale (either working together, being trained by him, or knowing him socially).

The Committee reviewed in detail each of the allegations and noted the lack of concern and care by Dr. Gale for the well-being of his vulnerable patients. The Committee noted the absence of empathy for the patients and noted the overwhelming tendency to use many drugs and a "conveyor belt type" of practice in the Pain Clinic in the administration of the nerve blocks. The Committee was mindful of an alternative approach to nerve blocks which is available where there would have been no need to administer heavy sedation/general anaesthesia. This alternative approach was clearly demonstrated by the defence experts who were able to provide similar effective chronic pain management without the need for a heavily sedated patient.

Indexed as: Gale (Re)

THE DISCIPLINE COMMITTEE OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO

IN THE MATTER OF a Hearing directed
by the Executive Committee of
The College of Physicians and Surgeons of Ontario,
pursuant to Section 36(1) of the ***Health Professional Procedural Code being Schedule 2 to the Regulated Health Professions Act, 1991, S.O. 1991, c.18, as amended***.

B E T W E E N:

THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO

- and -

DR. GEORGE DOUGLAS GALE

PANEL MEMBERS:	DR. P. HORSHAM (CHAIR) DR. Y. deBUDA R. SANDERS
Hearing Dates:	June 20, 21, 28, 2001 July 3 – 6, 2001 July 16 – 19, 2001 August 13 –17, 2001 September 17 – 19, 21, 2001 October 10 – 11, 2001
Decision/Released Date:	December 3, 2001
Penalty Hearing Date:	February 18 – 19, 2002
Penalty Decision/ Released Date:	March 15, 2002

On October 10, 2003, the Divisional Court altered some of the Discipline Committee's findings and returned the matter for a new penalty hearing. See College of Physicians & Surgeons (Ontario) v. Gale [2003] O.J. No. 3948.

DECISION AND REASONS FOR DECISION AS TO PENALTY

The parties appeared before the Discipline Committee on February 18 and 19, 2002 to present evidence and submissions as to the appropriate penalty in respect of the findings of professional misconduct and incompetence made regarding Dr. Gale in the Decision and Reasons for Decision dated February 5, 2002.

As set out in the Decision and Reasons for Decision dated February 5, 2002, the practice of Dr. Gale had been brought to the attention of the College of Physicians and Surgeons of Ontario by the Office of the Chief Coroner of Ontario as a result of the death of patient 1. Dr. Gale had participated in the failed resuscitation of patient 1. After a lengthy hearing, the Panel concluded that Dr. Gale had committed many very serious acts of professional misconduct and that he was incompetent. The Panel's conclusions related to the failed resuscitation of patient 1 as well as Dr. Gale's treatment of six other patients.

At the penalty hearing, the Panel had the benefit of further evidence and extensive submissions from both counsel for the College and counsel for Dr. Gale.

In its deliberations, the Panel applied the principles that it generally takes into account in determining what an appropriate penalty is in a discipline proceeding. These are:

1. Protecting the public;
2. Maintaining the reputation and the integrity of the profession;
3. General deterrence;
4. Specific deterrence;
5. Rehabilitation.

Counsel for the College submitted that revocation of the certificate of registration of Dr. Gale was the only appropriate penalty, along with a recorded reprimand. Counsel for Dr. Gale submitted that a penalty imposing conditions of re-training and re-assessment was appropriate. He submitted that the penalty given to Dr. B in his case should be considered as a guide to the

penalty for Dr. Gale since both Dr. Gale and Dr. B were involved in the failed resuscitation of patient 1.

The Panel notes that the findings in Dr. B's case were significantly less severe than the multiple allegations on which the Discipline Committee has found Dr. Gale guilty of professional misconduct and found him incompetent. The Panel therefore found the penalty against Dr. B to be of minimal relevance.

Dr. Gale's counsel further submitted that the existence of a long waiting list of patients for treatment and the reduction of Dr. Gale's income from approximately $500,000.00 a year since restrictions had been placed on his certificate of registration (a prohibition from performing general anaesthesia, conscious sedation or nerve blocks) constituted mitigating factors.

Dr. Gale's testimony at the penalty hearing provided an opportunity for the Panel to receive further information and to further assess Dr. Gale. This additional evidence was helpful to the Panel in determining that revocation is the only appropriate penalty in this case.

In particular, the Panel took into account the followings facts in assessing penalty:

- Dr. Gale was unable to properly resuscitate patient 1. Dr. Gale showed absolutely no empathy for the death of patient 1, a young mother of two children. He continued to maintain that he was not implicated in her death and that he was not the team leader for the resuscitation and had no responsibility for it. He showed no insight into his contribution to the death nor any appreciation of the evidence that patient 1's demise was due to a complication that arose from the administration of heavy sedation/general anaesthesia for nerve blocks, the type of medicine that he practices.

- Dr. Gale, despite providing evidence of three recent ACLS courses in which he scored over 75%, was still unable to reply correctly to questions about simple resuscitation. There appears to be an inability to put into practice what he has learned at the courses.

- Dr. Gale has no insight into his substandard treatment of serious medical conditions that arose in his chronic pain patients, where his actions fell below the standard of practice. He dismisses these issues as one-time events of little significance. He appears to refuse to see the danger in which he was placing the patients by not attending appropriately to these serious medical conditions of his patients.

In revoking Dr. Gale's certificate of registration, the Panel was not motivated by any disagreement with the practice of chronic non-cancer pain management. The Panel took note of the great need in the community for medical treatment of chronic non-cancer pain. As noted in its Decision dated February 5, 2002, the Panel accepted evidence from a number of physicians who do practice chronic non-cancer pain management with appropriate regard for the welfare of their patients. However, Dr. Gale's practice differed from those described.

Further, while waiting lists for appropriate treatment are a concern, this does not justify allowing Dr. Gale to continue to practice when his practice falls below the standard of practice of the profession in the manner set out in the Decision dated February 5, 2002. The Panel therefore could not accept Dr. Gale's counsel's submissions on this point. Similarly, the Panel was not persuaded that any financial hardship to Dr. Gale outweighed the need to protect the public.

Notwithstanding the need for appropriate chronic pain management, the protection of the public calls for a revocation in this case by reason of the need to protect the very vulnerable patients who seek relief from their chronic pain. In coming to its decision, the Panel took into account Dr. Gale's lack of empathy for his patients and for the deceased, patient 1. The Panel was also disturbed at his lack of insight into the dangers of his practice and the recklessness with which he prescribed the opiods.

Dr. Gale's attitude is perceived by the Panel to be dangerous. He does not appear to accept the fact that he has been found guilty and he does not appear to be willing to modify his practice. He appeared not to appreciate the fact that he chose to give about 60% of his patients significant sedation or general anaesthetics, contrasted with infrequent use by almost all of his expert witnesses, without ensuring that he is able to handle the life threatening complications that can arise at any time. This attitude is not compatible with an effective rehabilitation in a short period of time. Specific deterrence does not appear to be achievable by anything less than revocation. Also, the general deterrence aspect of this penalty is of great importance and a message must be sent to other physicians to take proper care of their patients and to ensure proper training and to update their skills.

The Panel concluded that Dr. Gale's professional care of his patients displayed a lack of knowledge, skill and judgment and disregard for the welfare of his patients that demonstrates that he is unfit to continue to practice. The finding of incompetence was such that the Panel believes that a restriction of the member's practice would not be sufficient in the circumstances to protect the public.

For the reasons given in our Decision dated February 5, 2002 making findings of professional misconduct and incompetence in this matter, together with the reasons as stated above, the Panel orders and directs as follows:

1. Dr. Gale shall appear before the panel to be reprimanded and that such reprimand is to be recorded on the register.

2. Dr. Gale's Certificate of Registration is to be revoked by the Registrar effective immediately.

Given the seriousness of the misconduct and the protracted nature of the hearing, the Committee considers this to be an appropriate case for an award of costs. Therefore, the Committee orders that Dr. Gale shall pay to the College costs in the amount of $30,000.00, to be paid within three (3) months. The amount is reasonable and certainly does not cover all of the costs that could have been awarded by the Committee.