

Urgencies and Emergencies

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Disclosures

- President, American Board of Dental Specialties
- President Elect, Tri-County Dental Society
- Past President, American Society of Dentist Anesthesiologists
- I am not representing or speaking on behalf of any of these past/present positions



Nothing to Disclose

Who am I?

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Urgency vs Emergency



Urgencies

- Traditional Emergencies
- Unexpected events
- Potential to become emergencies

Power Outage

- Studio City
- 5th Floor
- 3 year old
- Middle of treatment
- Auto vs telephone pole with transponder
 - Guess who won

Power outage

- Monitor
- Oxygen supply
- Lighting
- Suction

Monitor

- Battery life
- Blood pressure
 - Manual
- Pulse Oximeter

Pulse Oximeter



Oxygen Supply

- Will oxygen flow stop with a digital flowmeter?
- Backup oxygen supply

Lighting

- Surgical light
- Flashlight
 - Plug in
- Flood light
 - Slyde

Surefire



Slyde



Manual Suction



Vitalograph



Suction



Suction



Crossed Lines

- New Construction
- Individual operator
- Remodel
- Pin index safety system

Crossed Lines



Crossed Lines



Del Mar

- Pediatric patient under general anesthesia
- During the procedure
- Police enter the office

Del Mar, CA

- Police ordered evacuation of entire building
- Toxic substance spilled
- People getting sick

Fallbrook, CA

- 2 year old
- Induction
- Radiographs
- Front office goes to lunch

Fallbrook

- Paramedics, EMT, full gear walk past the waiting room and into the operatory
- Where is the emergency?

Beverly Hills, CA

- 37 year old female
- No reported medical issues
- Very nervous
- Scheduled 6 hours

Beverly Hills, CA

- Attach monitors
- Start IV
- Initial BP 220/120
- Patient appear nervous but not an extreme presentation

Beverly Hills, CA

- No primary care, only Ob/Gyn
 - Contacted, last 3 visits normal BP
 - Most recent visit 3 months ago
- Decide to try anxiolytic dose
- Gave multiple medications with minimal effect on mood BP

Beverly Hills, CA

- Informed husband and dentist that not only will we have to cancel the case, this will be a 911 call to transport
- Advised patient that we will abort
- Prepared to transport

San Diego, CA

- 4 year old
- Mother spanish speaking only
- Father, United States Marine
 - Speaks english better than my spanish
- Child very upset and crying
 - Unable to do routine physical examination

San Diego, CA

- Reported hospitalization at birth with no problems since
- Just relocated from TX and had annual physical examination just before moving
- Healthy child

San Diego, CA

- Routine IM induction
- Precordial, Pulse Oximeter and BP placed
- Started IV
- Placing monitors, ecg...then the fun starts

San Diego, CA

- 2 surgical scars
 - Center below sternum
 - Right lateral chest
- Decision time
 - Continue the case
 - Abort

Endodontic Office

- 25 y/o ASA class I
- 6'3"
- 240#
- Physically fit

Loma Linda University

- 22 year old
- Patient with mental disabilities
- Physically fit
- Afraid
- Needed restraint

Lunch Break

- Returned from Lunch
- Healthy 3 year old
- No medical issues
- NKA
- No meds
- Started Case

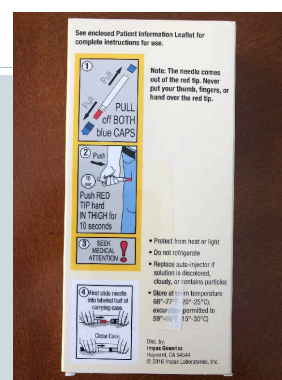
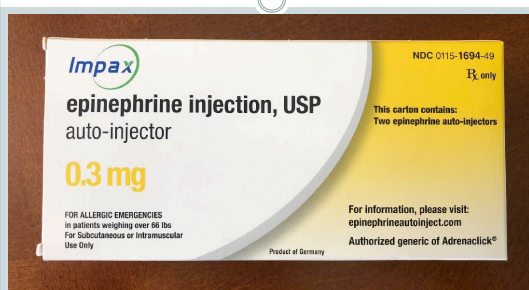
Technique Selection

- Patient at LLU Surgery Center
- Prader willi syndrome
 - Low muscle tone
 - Short stature
 - Incomplete sexual development
 - Cognitive disabilities
 - Behavioral problems
 - Insatiable hunger
 - Slow metabolism
 - Life threatening obesity

Patient Selection

- Failure to thrive
- 8 years old
- 11.5 pounds

Medication Shortages



Reverse Approach to Emergency Readiness

- When looking at Emergencies we tend to plan forward.
- I think it can help to look backwards too.
- Review of accusations and related emergencies

Dental Board Accusations

- Process

Truth is stranger than Fiction

- Real Cases
- Allegations taken from CA Dental Board Complaints
 - Facts from public records
 - Dental Board expert's opinion
 - Unproven, have not been defended
- Incomplete picture as we only have the complaint and not the medical records nor dentist's explanation
- We will assume they are true for teaching purposes

Case One

- Periodontal Surgery
- Intravenous Conscious Sedation
- Estimate of two hours
- Frequent flyer

Accusation Facts

14 15. On or about January 3, 2017, Respondent treated patient T.K. (T.K. or patient) for
 15 laser-assisted periodontal surgery under intravenous conscious sedation. The surgery was
 16 scheduled for approximately two hours. Respondent had previously performed periodontal work
 17 for the patient in 2015 and 2016, without complication.

Accusation Facts

18 16. Approximately 10 years prior to the scheduled 2017 periodontal work, the patient was
 19 sedated during a routine colonoscopy. During the colonoscopy, the patient had difficulty waking
 20 up from the anesthesia. The patient reported this episode to Respondent during consultation for
 21 the 2017 procedure.

Accusation Facts

22 17. During treatment planning, T.K. reported smoking 1.5 packs of cigarettes a day to
 23 Respondent. Respondent never recorded the total duration of this smoking habit. T.K. was on
 24 medication to treat hyperlipidemia. Respondent never documented the duration of treatment for
 25 hyperlipidemia. Despite the unknown duration of smoking habit, prior anesthesiology
 26 complications, and chronic disease of unknown duration, Respondent classified the patient as
 1 ASA 1 – a healthy, non-smoking patient. The patient should have been classified ASA 2-4, as he
 2 at least was a smoker and had a chronic disease. His exact classification is uncertain, however, as
 3 Respondent did not ascertain enough information about the patient's history to give an accurate
 4 ASA score.
 5

Accusation Facts

6 13. American Society of Anesthesiologists (ASA) Physical Status Classification System
 7 is as follows:
 8 P1 - A normal healthy patient
 9 P2 - A patient with mild systemic disease
 10 P3 - A patient with severe systemic disease
 11 P4 - A patient with severe systemic disease that is a constant threat to life
 P5 - A moribund patient who is not expected to survive without the operation
 P6 - A declared brain-dead patient whose organs are being removed for donor purposes.¹

Accusation Facts

9 19. Respondent never assessed or indicated the minimal thyromental distance² of the
10 patient before the procedure; therefore, Respondent was not prepared that T.K. might have an
11 airway that would be difficult to manage if consciousness were lost during the procedure.

27 ² Thyromental distance is the distance from the thyroid notch to the tip of the jaw, and is
28 commonly used to predict the difficulty of intubation in a patient.

Accusation Facts

12 20. Respondent performed the periodontal procedure, during which the patient's blood
13 pressure was only monitored four times over a two hour period. The patient was not intubated.
14 The only vital sign monitors were a blood pressure cuff and a pulse oximeter. There were no
15 monitoring strips. Instead, Respondent's assistant noted the oxygen saturation readings and wrote
16 them down at periodic intervals. Respondent did not use a time-based sedation record.
17 Respondent's bag-valve-mask had a maximum oxygen flow of only 3 liters/minute, less than 1/3
18 the required rate per Board Regulations.

Accusation Facts

19 21. Respondent had J.F., his office manager, as the anesthesia assistant for the surgery,
20 despite her presence only for part of the procedure, and lack of indication of credential as an
21 anesthesia assistant.

Accusation Facts

22 22. Medications given during the duration of the surgery included 120 mg of propofol.
23 Pursuant to the manufacturer's warning, propofol requires a high level of clinical anesthesia skill
24 and continuous attention of the patient's vital signs. The warning states "for general anesthesia or
25 monitored anesthesia care sedation, [propofol]...should be administered only by persons training in
26 the administration of general anesthesia and not involved in the conduct of the surgical/diagnostic
1 procedure. Sedated patients should be continuously monitored..."
2

Accusation Facts

3 23. During the second hour of the procedure, the patient lost consciousness and oxygen
4 saturation decreased, which Respondent noticed via oxygen saturation monitoring equipment.
5 Respondent believed that the patient's tongue might be constricting the patient's airway.

Accusation Facts

6 24. After some difficulty, Respondent moved the patient's tongue, but the patient's
7 condition did not improve. Respondent then performed CPR and told the office staff to call 911.
8 Emergency services transferred T.K. to [REDACTED] hospital and admitted him. A CT scan
9 showed signs of fluid in the brain. Patient remained unresponsive, and showed signs of oxygen
10 deprivation for several minutes. Four days later, patient T.K. died. An autopsy report showed the
11 patient's brain was markedly swollen, and had signs of hemorrhaging.

Cause for Discipline

- Incompetence, gross negligence and repeated acts of negligence
- Failed to recognize chronic diseases
- Incorrectly used ASA Classification
- Failed to use time based anesthesia record
- Used propofol as a sedative
 - Required training beyond his clinical skill level
 - "while simultaneously performing oral surgery"

FDA Warning

For general anesthesia or monitored anesthesia care (MAC) sedation, DIPRIVAN should be administered only by persons trained in the administration of general anesthesia and not involved in the conduct of the surgical/diagnostic procedure.

Overdose

OVERDOSAGE:

If overdosage occurs, DIPRIVAN administration should be discontinued immediately.

Overdosage is likely to cause cardiorespiratory depression. Respiratory depression should be treated by artificial ventilation with oxygen. Cardiovascular depression may require repositioning of the patient by raising the patient's legs, increasing the flow rate of intravenous fluids, and administering pressor agents and/or anticholinergic agents.

Case 2

Accusation Facts

FACTUAL BACKGROUND: PATIENT N.J.

11. On January 17, 2017, Patient N.J.¹ presented to Respondent's office for a planned periodontal surgery procedure to be performed under conscious sedation and local anesthesia. In the procedure room, an intravenous [IV] line and vital signs monitors were placed. Versed and Fentanyl were injected into the IV line, at Respondent's direction, then propofol mixed with ketamine was injected

Accusation Facts

12. Immediately after receiving the propofol/ketamine mixture, N.J. stopped breathing and became unresponsive. Respondent began yelling for N.J. to "wake up" but took no action to resuscitate N.J. An associate in the office heard the yelling, came into the procedure room and assessed N.J. The associate initiated a 911 call, started chest compressions and called for the automated external defibrillator [AED]. The AED in Respondent's office did not have batteries installed. Batteries were then installed, but when the AED finally turned on it advised to "not provide a shock." The same associate continued chest compressions and a dental assistant administered positive pressure oxygen by mask until emergency personnel arrived and took over the rescue operations.

Accusation Facts

16 13. Emergency personnel questioned Respondent and Respondent told them that she
17 provided N.J. a little "prop" [propofol] but did not mention fentanyl or ketamine. An employee of
18 the practice spoke up and advised that fentanyl had also been used. Once emergency personnel
19 learned that fentanyl was involved they immediately administered naloxone [opioid reversal
20 medication] and N.J. began to wake up and breathe on her own.

Accusation Facts

21 14. On March 21, 2017, Board investigators performed an inspection of Respondent's
22 office to inspect equipment and drugs utilized in dental procedures and emergency situations.
23 This inspection revealed a number of deficiencies and substandard conditions related to conscious
24 sedation and general anesthesia, including, but not limited to, unsterile drug handling, inadequate
25 drug labeling, unsecured Class II drug storage, inoperable AED, unsanitary storage of emergency
26 oxygen face masks, 16 outdated anesthesia drugs and possession of drugs not related to dentistry
27 _____¹ Patient initials are used herein for privacy purposes. The names of patients referenced
28 will be released pursuant to a request for discovery.

1 or conscious sedation-level anesthesia.

Accusation Facts

2 15. On March 21, 2017, Board investigators asked to see the file of N.J. and were told
3 that N.J.'s file was not in the office and that Respondent had the file with her to "prepare it to be
4 copied and released to the patient." In addition, Respondent's office was not able to provide
5 Board investigators with a Controlled Substances Log as required.

Cause for Discipline

FIRST CAUSE FOR DISCIPLINE

(Gross Negligence/Repeated Acts of Negligence)

6
7
8 16. Respondent is subject to disciplinary action under section 1670 in that Respondent
9 selected and administered propofol and ketamine, drugs normally used to induce and maintain
10 general anesthesia. With these drugs, Respondent induced general anesthesia and caused life-
11 threatening pulseless respiratory arrest in N.J. Respondent's conscious sedation permit only
12 allows Respondent to use drugs and doses that will induce and maintain a state of light conscious
13 sedation. Respondent does not hold a general anesthesia permit. This conduct constitutes gross
14 negligence and repeated acts of negligence.

Cause for Discipline

SECOND CAUSE FOR DISCIPLINE

(Gross Negligence/Repeated Acts of Negligence)

15
16
17 17. Respondent is subject to disciplinary action under section 1670 in that Respondent
18 failed to obtain informed consent. N.J. only consented to conscious sedation anesthesia. By
19 choosing and administering general anesthesia drugs in doses high enough to cause pulseless
20 respiratory arrest, Respondent violated N.J.'s informed consent. This conduct constitutes gross
21 negligence and repeated acts of negligence.

Cause for Discipline

THIRD CAUSE FOR DISCIPLINE

(Gross Negligence/Incompetence/Repeated Acts of Negligence)

22
23
24 18. Respondent is subject to disciplinary action under section 1670 in that Respondent
25 lacked the required training to perform general anesthesia, did not hold a General Anesthesia
26 Permit and overdosed N.J. with general anesthesia drugs and caused life-threatening respiratory
27 arrest. In addition, Respondent failed to properly react to the medical emergency and failed to
28 perform her duty to direct and perform life-saving maneuvers. Moreover, Respondent instructed
5
1 and relied on her staff to perform acts for which they were not licensed, such as drawing up drugs
2 and injecting drugs by IV. This conduct constitutes gross negligence, incompetence and repeated
3 acts of negligence.

Accusation Facts

Patient K.E.

12. K.E., an 86-year-old male was referred by [REDACTED] DDS, a general dentist, to Respondent, an oral surgeon, for consultation regarding the patient's desire for maxillary and mandibular fixed-implant- retained dental appliances. An assessment was made and eventually two surgeries were scheduled with the first for March 3, 2015. The patient's daughter-in-law and son escorted the patient home after the phase I surgery and gave two tablets of postop pain medication upon arrival at home as directed by the office dental assistants. However, three hours after returning home from the appointment, the patient's daughter-in-law called the office to say that the patient became non-responsive with labored breathing. The daughter-in-law was directed to call the paramedics.

Accusation Facts

13. The paramedics transported the patient to [REDACTED] Hospital where further evaluation identified acute/chronic respiratory failure requiring intubation and admission to the intensive care unit as well as a hemorrhagic stroke with residual right-sided weakness. The patient was discharged to a skilled nursing facility on March 9, 2015 for rehabilitation. As of January 16, 2016, the patient was living with his son and daughter-in-law and his full recovery from the hemorrhagic stroke was uncertain. The patient passed away on February 18, 2017.

Accusation Facts

14. Respondent's treatment plan was for the removal of K.E.'s remaining 18 teeth, the removal of four quadrants of ("severe") exostosis, the placement of eight endosteal implants with the treatment being done under general anesthesia. The treatment was to be completed in two separate appointments. The extractions and exostosis removal were to take place in the first appointment and the implants were to be placed during the second appointment (not completed).

Accusation Facts

15. K.E. filled out and signed Respondent's medical history form on October 2, 2014. The patient indicated on the form that he was in good health and identified his physician as Dr. [REDACTED]. He indicated that he had been hospitalized in the past and that he was currently taking medicines. In addition, he indicated he was sensitive or allergic to codeine. The patient

also indicated he had the following: high blood pressure, radiation therapy, latex allergy, chemotherapy, and artificial prosthetic joints. The patient failed to answer the last 12 questions on the medical history form. The unanswered questions included liver disease, blood disease, kidney disease, and lung disease. No additional notes appear on the medical history form to clarify the missing answers. The patient also indicated he did not have any disease, condition, or problem not listed above. In the remainder of the medical history form, the patient indicated he smoked one pack per day, dental appointments made him nervous, and that he had had local anesthesia in the past.

Accusation Facts

16. Respondent assigned an American Society of Anesthesiologists (ASA) physical status of three to K.E. An evaluation form was filled out for the patient including vital signs. Under past medical history appears the following: 86-year-old male with hypertension, mild MI no damage 2 mos. was admitted to [REDACTED] lung CA, COPD, AAA repaired 2004. Under past surgical history appears prostate, supra pubic cystostomy. Under meds: see list. Under allergies: codeine and Band-Aids tape. Under social: TOB one PPD, ETOH negative. Under findings: multiple decayed teeth followed by notes that are not legible. Under diagnosis: failing dentition and severe exostosis in all quads. Under plan: medical evaluation presurgery to eval cardiac risk and pulmonary risk factors. Extract all remaining teeth, four quads of exostosis removal. The teeth scheduled for extractions are individually circled. In a small box at the bottom of the evaluation page appears four choices for patient management: IV GA, IV sed, local/NTX, and oral sed. In the IV sed category is written two hours and an illegible mark appears to its left. The ASA three classification is circled. At the bottom of the evaluation form there appears a space for a doctor signature and it may be Dr. [REDACTED] initials but they are unclear. In addition, space for a staff member signature appears with the signature [REDACTED].

Accusation Facts

17. A medication list included the following: Celebra, Citalopram, Lisinopril, pantoprazole, trazodone and Carvedilol. A copy of a panoramic radiograph with the patient's name and a date of October 2, 2014 was noted. In addition, a CT scan was noted but not present (presumably sent to Respondent on disk) with an accompanying letter addressed to [REDACTED].

This letter and CT scan were sent by [REDACTED]. It is unclear what the route of this letter was and what the implications of this scan were.

Accusation Facts

18. An estimate of cost for phase 1 and phase 2 of the treatment was provided to the patient and signed. The cost for phase 1 was \$[REDACTED]. The cost for phase 1 included \$1,657 for general anesthesia. A credit card payment of an amount equal to the estimated cost of phase 1 was made on March 3, 2015. Hence, the patient was billed for and paid for general anesthesia.

Accusation Facts

19. Respondent's office faxed a letter requesting presurgical evaluation of cardiac and pulmonary risk factors for K.E. to his cardiologist, [REDACTED] MD, on October 3, 2014. Respondent did not mention the use of any anesthesia services he was planning to provide in this letter. Dr. [REDACTED] responded by letter on November 10, 2014 and stated "From a cardiac standpoint K.E. is at low risk for the proposed dental procedure." No mention is made of pulmonary risk factors. No other letter or other document from any physician appears in Respondent's dental records, including Dr. [REDACTED]

Accusation Facts

20. K.E.'s daughter-in-law called on January 28, 2015 to schedule the surgery with Respondent's office. Dr. [REDACTED]'s office informed Respondent that K.E. had decided against a planned healing denture to be placed at the completion of phase 1 surgery. The anesthesia record included the paper tape output from an automated monitoring device. A letter to Respondent from the patient's son, S.E. was written on January 18, 2016. In this letter, the patient's son states that his father was overdosed on pain medication, which Respondent had told him in their conversation. The patient returned home weeks after the surgery and rehabilitation. He also states that his father has not returned to his presurgery status as of the date of this letter. He further requested Respondent to contribute to the ongoing costs of his father's recovery (which he states have been in excess of \$100,000 at that time).

Accusation Facts

21. A prescription copy from Respondent for patient K. E. is extremely difficult to read. It appears to be written for Norco 5/325. The number of tablets is unclear. The directions for taking the medicine are also unclear. The prescription was written on March 3, 2015. The anesthesia record lists a series of prescriptions and on that form amoxicillin 500 mg and Peridex are circled along with Norco and below the depiction of Norco 5/325 is noted.

Cause for Discipline

23. Advanced age (86 years old in this case) increases the risks for surgery and anesthesia services whether they are performed on an inpatient or outpatient basis. More high quality consultations are needed with increasing age. This fact was evident in that during the hospitalization of the patient after surgery and admission, a bilateral carotid artery occlusion of 90% was identified.

Cause for Discipline

24. The appropriate standard of care for the very elderly is usually to provide treatment in a hospital environment after all needed preoperative consults have been obtained and risks assessed. This patient should have been treated in a hospital in order to deal with any unexpected exacerbation of organ system pathology.

Cause for Discipline

16 25. There was no evidence in Respondent's records that he consulted with the patient's
 17 primary care physician, [REDACTED] MD, before treatment even though he recognized the
 18 need as stated in his evaluation form. No consultation requests from Respondent were noted in
 19 the records of Dr. [REDACTED]. Respondent was therefore unaware of either the extent or existence of
 20 the patient's following disorders:

- 21 i. Bladder atony
- 22 ii. Chronic Obstructive Pulmonary Disease (COPD)
- 23 iii. Peripheral vascular disease
- 24 iv. Recurring episodes of major depression
- 25 v. Gastritis
- 26 vi. Hypertension
- 27 vii. Insomnia
- 28 viii. Shortness of breath

Cause for Discipline

- 1 ix. Urethral erosion
- 2 x. Urinary catheter in place
- 3 xi. Urinary retention

Cause for Discipline

4 26. The appropriate standard of care is for the primary care physician to be involved in
 5 the preoperative assessment of health and risk. In fact, Dr. [REDACTED] had been preoperatively
 6 consulted regarding a different surgery for K.E. in the fall of 2014 and had sent the patient for a
 7 pulmonary consultation.

Cause for Discipline

8 27. Respondent failed to investigate the extent of the patient's COPD although he was
 9 aware the patient had a 75-year, pack a day history of smoking. In fact, Respondent had an
 10 entire column of his medical history form in which no answers appeared. These questions
 11 concerned liver disease, blood disease, kidney disease, asthma, stroke, lung disease and muscle or
 12 skeletal disorders, that should have been inquired of Dr. [REDACTED] the primary care physician.

Cause for Discipline

13 28. With the information that would have been available from Dr. [REDACTED] had
 14 Respondent consulted him, patient K.E. would likely merit an American Society of
 15 Anesthesiologists Physical Classification of 4 rather than 3, which then represents a higher
 16 treatment risk and the need for hospitalization. The medical history form with missing patient
 17 responses should have been reviewed by Respondent, and upon seeing the missing information,
 18 additional investigation done and amplification added.

Cause for Discipline

19 29. Respondent asked for a cardiovascular consultation and a pulmonary consultation in
 20 his letter to Dr. [REDACTED] (a cardiologist). It is inappropriate to request a pulmonary consultation of a
 21 non-pulmonary specialist because it is outside of their area of expertise. Dr. [REDACTED] did not
 22 respond to the request for pulmonary consultation. It would have been appropriate for Respondent
 23 to question Dr. [REDACTED] regarding the patient's COPD status.

Cause for Discipline

24 30. A preoperative assessment of the COPD status of patient K.E., was not just desirable
 25 but imperative for a patient with a 75-year pack-a-day smoking history. Respondent's failure to
 26 obtain a medical risk assessment and pulmonary consultation with the patient's primary care
 27 physician was below the standard of care, where Respondent recognized a history of lung cancer
 28 and very extensive, long-term smoking history.

Cause for Discipline

1 31. Respondent's treatment planned for IV sedation but listed the procedure as general
 2 anesthesia on the anesthesia record, consented for general anesthesia, billed for general anesthesia
 3 and collected for general anesthesia. However, the selection and amount of medications used
 4 during the procedure are not those used in general anesthesia but rather consistent with
 5 Respondent's planned IV sedation. Intravenous sedation services are commonly reimbursed on a
 6 much lower fee schedule.

Cause for Discipline

7 32. Respondent's medication list for the patient was incomplete because he was unaware
 8 of medications that had been prescribed for COPD. It is common for patients to be unaware of the
 9 types and amounts of their prescriptions. According to the patient's daughter-in-law,
 10 Respondent's dental assistants directed the patient's daughter-in-law to give two tablets of Norco
 11 5/325 upon arrival home after the surgery. This would represent a serious overdose of
 12 hydrocodone for this patient. It is recommended that elderly patients receive a dose that is in the
 13 low end of the range of adult doses (2 to 10 mg Hydrocodone). This patient received 10 mg. post
 14 anesthesia. Elderly patients are at elevated risk for respiratory depression.

Cause for Discipline

15 33. The postoperative instructions for patients, including pain medications, should be the
 16 responsibility of an experienced RN, CRNA, dentist, or physician. It is a responsibility that
 17 should not be assigned to dental assistants due to their lack of medical knowledge.

Cause for Discipline

27 35. Respondent billing and charging K.E. for a more expensive general anesthesia
 28 treatment, that was neither planned nor provided was negligent.

Cause for Discipline

1 36. Respondent allowing his dental assistants to independently give post operative
 2 instructions for pain medications was negligent.

