# STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

DEPARTMENT OF HEALTH,	)		
BOARD OF MEDICINE,	)		
	)		
Petitioner,	)		
	)		
vs.	)	Case No.	10-4714PL
	)		
ENRIQUE PUIG, M.D.,	)		
	)		
Respondent.	)		
	)		

# RECOMMENDED ORDER

Pursuant to notice, a final hearing was held in this case on October 27 and 28, 2010, and November 18, 2010, in Winter Haven, Florida, before Susan B. Harrell, a designated Administrative Law Judge of the Division of Administrative Hearings.

# APPEARANCES

For Petitioner: Greg S. Marr, Esquire

Department of Health

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For Respondent: Jon M. Pellet, Esquire

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## STATEMENT OF THE ISSUES

The issues in this case are whether Respondent violated section 458.331(1)(t), Florida Statutes (2008), <sup>1/</sup> and, if so, what discipline should be imposed.

## PRELIMINARY STATEMENT

On April 26, 2010, Petitioner, Department of Health (Department), filed an Administrative Complaint before the Board of Medicine (Board), alleging that Respondent, Enrique Puig, M.D. (Dr. Puig), violated section 458.331(1)(t). The case was forwarded to the Division of Administrative Hearings on July 2, 2010, for assignment to an Administrative Law Judge.

The final hearing was scheduled for September 13 and 14, 2010. On August 23, 2010, a Joint Motion to Continue Hearing was filed. The motion was granted by Order dated September 9, 2010, and the final hearing was rescheduled for October 27 and 28, 2010.

The parties filed a Joint Pre-hearing Stipulation, in which the parties stipulated to certain facts contained in Section E of the Joint Pre-hearing Stipulation. To the extent relevant, those stipulated facts have been incorporated in this Recommended Order.

On October 11, 2010, Petitioner filed a Motion to Take
Official Recognition of Florida Administrative Code Rule

64B8-8.001, effective January 2, 2009. Official recognition was taken of the rule by Order dated October 15, 2010.

At the final hearing, Joint Exhibits 1 through 13 were admitted in evidence. The Department called the following witnesses: T.M.; R.R.; Glenda Johnson, R.N.; James W. Dennis, M.D.; Desiree Dowling, R.N.; and Anibal Sanchez-Salazar, M.D. Petitioner's Exhibits 1 and 2 were admitted in evidence.

At the final hearing, Dr. Puig testified in his own behalf and called the following witnesses: Brian M. Jurbala, M.D.;
Nikolaus Gravenstein, M.D.; Heidi Dilworth; Ashley Pollock;
Vincent Carifi, M.D.; and Dominick Ottaiano, M.D.. Dr. Puig proffered the testimony of Charbel Kennan, M.D. Respondent's Exhibits 1, 5, 6, 8 through 11 and 16 were admitted in evidence.
Respondent's Exhibits 12 through 15 were proffered.

On October 26, 2010, Respondent filed Respondent's Motion for Official Recognition, requesting that official recognition be taken of sections 458.331(1)(t), 456.50, 766.102, and 766.103, Florida Statutes (2009). The motion was granted at the final hearing.

On November 23, 2010, Respondent filed Respondent's Motion for Reconsideration and Admission of Proffered Respondent's Exhibits 7 and 12 through 15. The exhibits were articles dealing with compartment syndrome and position of patients.

Although Orasan v. Agency for Health Care Administration,

668 So. 2d 1062, 1063 (Fla. 1st DCA 1996), stands for the

proposition that excerpts from medical texts and treatises may

be used to bolster the testimony of an expert witness in an

administrative proceeding, the articles proffered by Respondent

were not identified as authoritative. The issue of whether the

excerpts were authoritative was not addressed in Orasan. In

section 90.706, Florida Statutes (2010), authoritative

literature may be used to cross-examine an expert witness. It

stands to reason that if only authoritative literature can be

used to cross-examine, then only authoritative literature should

be used to bolster an expert witness's opinion. The motion for

reconsideration is denied.

At the final hearing, the parties did not make closing arguments, but were given leave to file a written closing argument. On January 14, 2011, Respondent filed Respondent's Closing Argument Regarding Witness Credibility. On January 20, 2011, Petitioner filed Petitioner's Motion to Strike Respondent's Closing Argument Regarding Witness Credibility. The motion to strike is denied.

The nine-volume Transcript was filed on December 20, 2010. At the final hearing, the parties agreed to file their proposed recommended orders within ten days of the filing of the transcript. On December 14, 2010, the parties filed a Joint

Motion Regarding Submission of Proposed Recommended Orders, requesting that the time for submitting proposed recommended orders be extended to January 11, 2011. On January 7, 2011, Respondent filed a motion requesting that the time for filing proposed recommended orders be extended to January 14, 2011. The request was granted by Order dated January 7, 2011. The parties timely filed their Proposed Recommended Orders.

## FINDINGS OF FACT

- 1. The Department is the state department charged with regulating the practice of medicine pursuant to section 20.43 and chapters 456 and 458, Florida Statutes.
- 2. Dr. Puig was at all times material to the allegations in the Administrative Complaint a licensed physician in the State of Florida, having been issued license No. 82847.

  Dr. Puig holds a certificate from the American Board of Anesthesiology.
- 3. In the early morning of January 2, 2009, T.M. presented to the Central Florida Surgery Center in Lakeland, Florida, for outpatient surgery to be performed by Shreekant Tripathi, M.D. The specific procedures to be performed were bilateral lower eyelid blepharoplasty, mini-face lift, and suspension of the mid-face area with the Endotine Midface implant device. She was accompanied by her husband, R.R.

- 4. T.M. has been licensed as a physician in Florida for
  28 years and has worked as the head of the Tampa General
  Hospital Adult Emergency Department and as that hospital's chief
  of staff.
- 5. T.M. has a prior history of a deep vein thrombosis (DVT), which was treated medically. She experienced a DVT in her leg sitting in an airplane for an extended period of time while traveling from Florida to the Midwest. DVT is a medical condition that occurs when a thrombus (blood clot) forms in one of the large veins, leading to either partial or complete blockage of the vein.
- 6. After completing the financial paperwork and other forms at the front desk of Central Florida Surgery Center, T.M. was taken to the pre-operative holding area at approximately 7:00 a.m.
- 7. Once in the pre-operative holding area, the nurse went over the contents of T.M.'s procedures and reviewed T.M.'s medical history and medications taken. The nurse administered medications other than sedation and took T.M.'s vital signs, including her blood pressure.
- 8. In order to take T.M.'s blood pressure, the nurse in the pre-operative holding area placed a blood pressure cuff on T.M.'s right upper arm. The blood pressure cuff would not have given a reading if it was placed too tightly, and T.M. would

have complained of pain. At the time that the blood pressure cuff was placed, T.M. was awake and alert and did not express any discomfort. The nurse was able to get a reading from the blood pressure cuff.

- 9. While T.M. was in the pre-operative holding area and after the vital signs were taken, T.M.'s temperature was 97.4 degrees. T.M. met with Dr. Tripathi, who went over her surgery with her. Dr. Tripathi marked the areas for her facial cosmetic procedures.
- anesthesiologist. He conducted a pre-anesthesia evaluation of T.M. Dr. Puig examined T.M. and reviewed the medications that she was taking. He also reviewed T.M.'s medical history, including her history of DVT. As part of his plan for anesthesia, Dr. Puig included the use of sequential compression devices on T.M.'s lower extremities.
- 11. While in the pre-operative holding area, T.M. was given Versed as a pre-medication for the surgery. T.M. was taken to the operating room, accompanied by Dr. Puig, who remained with T.M. until she was handed to the post-anesthesia care unit (PACU) nurse. T.M. entered the operating room at 8:19 a.m.
- 12. The blood pressure cuff that was placed by the pre-operative nurse was left in place on the upper right arm.

The blood pressure cuff was disconnected from the monitoring device in the pre-operative holding area and accompanied T.M. into the operating room, where it was connected to another monitoring device.

- 13. After T.M. was taken to the operating room, she moved onto the operating table on her own with some assistance.

  Monitoring equipment was then connected to T.M. The monitoring equipment included a pulse oximeter on the left hand, sequential compression devices on the lower extremities, and the blood pressure monitoring device. Dr. Puig did not use any device to monitor T.M.'s temperature during the surgery. An IV had been placed in the pre-operative area on T.M.'s left wrist and was running in the operating room.
- 14. T.M. was positioned flat on her back on the operating table with her shoulders on the operating table using a mattress, a pillow, foam pads, and sheets. On the table, under T.M., was a two-to-three-inch thick mattress. On top of the mattress, under T.M., was a bottom sheet that ran longitudinally the length of the table. On top of the bottom sheet, perpendicular with, or at a 90-degree angle to the table, was a folded sheet from 18-to-30 inches wide. This crossways sheet is called a draw sheet and was under T.M. with the top edge at the armpit and the lower end in line with the waist or buttocks.

The draw sheet was pulled up between T.M.'s arm and torso for later tucking.

- 15. A foam pad, egg-crate device was placed on the right arm between the arm and the table and T.M. The device is not large enough to completely cover the arm. The bottom sheet was tucked around the arm between the egg-crate device and T.M.'s torso. The draw sheet was then tucked around the outside of the arm and under the mattress with a portion left protruding, which could be pulled on later to begin the process of removing the sheets. The purpose of the sheets was to keep T.M.'s arm from falling off the table during surgery. The sheets were supposed to be snug, but not so tight that one could not insert two fingers between the sheets and T.M.'s arm.
- 16. In addition to the sheets that covered T.M., a Bair Hugger was used. A Bair Hugger is a warming device that uses forced warm air to keep a patient warm during surgery.
- 17. The blood pressure cuff was under a portion of the egg-crate device, the bottom sheet, the draw sheet, and the Bair Hugger. The top edge of the blood pressure cuff was just under the armpit and the bottom edge was approximately three-to-four inches above the elbow joint. The blood pressure cuff had an inflatable rubber bladder and normally would have an attached inlet tube about six-to-eight inches long that would extend down T.M.'s arm toward her wrist.

- 18. In order to eliminate sources of infection, a sterile field was created by using sterile towels and sterile drapes.

  The sterile drape covered T.M. after the other sheets and blankets were in place. The sterile towels were placed around T.M.'s head.
- 19. At 8:41 a.m., the surgery began. Prior to the commencement of surgery and while in the operating room,
  Dr. Puig monitored T.M.'s blood pressure using the monitoring device in the operating room and the blood pressure cuff that was placed on T.M.'s right arm. Dr. Puig had blood pressure readings until 8:58 a.m., when Dr. Puig was unable to get blood pressure readings.
- 20. Dr. Puig asked Dr. Tripathi to step aside and allow him to check the blood pressure cuff. Dr. Puig was on the right side of T.M. and moved to the left side of T.M. He asked the circulating nurse to hold the sterile drape so that he could go under the drape to check the blood pressure cuff. Dr. Puig went under the drape and felt the blood pressure cuff. The blood pressure cuff was deflated. He disconnected the tube from the blood pressure cuff and called for a new blood pressure cuff. He placed the new blood pressure cuff to the blood pressure monitoring device. Dr. Puig was able to get accurate blood pressure readings from the new blood pressure cuff and the

monitoring device that had been attached to the blood pressure cuff on T.M.'s right arm. Dr. Puig left the deflated blood pressure cuff on T.M.'s right arm during the surgery.

- 21. After a blood pressure cuff was placed on T.M.'s left arm, Dr. Tripathi continued with the surgery. The surgery ended at 1:48 p.m., at which time the circulating nurse began to remove the sterile drape and sheets from T.M. When the nurse removed the deflated blood pressure cuff on T.M.'s right arm, she noticed that the arm below the blood pressure cuff was mottled, blue, red, dark blue and dark red. There were blisters on T.M.'s right arm where the blood pressure cuff had been.

  T.M.'s right arm was swollen. The condition of T.M.'s right arm was brought to the attention of Dr. Puig. Dr. Puig examined and evaluated T.M.'s condition.
- 22. At 2:00 p.m., T.M. was transferred to the PACU.

  T.M. was alert. Her temperature was 98 degrees. Her husband,

  R.R., was at bedside when T.M. was taken to PACU and stayed at

  her bedside until T.M. was discharged.
- 23. T.M. was experiencing extreme pain in her right arm and felt a tender hard spot on her right bicep. The post-operative nurse noted the condition of T.M's right arm as red and swollen from the biceps to the tips of T.M.'s fingers with blisters on the upper part of the extremity. Dr. Puig noted that T.M. had decreased sensation in her right finger tips and

some decrease in motor activity and that T.M's radial and ulnar pulses were intact. He ordered that the right arm be elevated with the use of pillows.

- 24. At 2:15 p.m., Dr. Puig was at T.M.'s bedside, monitoring T.M.'s condition. Dr. Tripathi was aware of T.M.'s condition and also appeared at her bedside to monitor her condition. Dr. Puig consulted with Dr. Tripathi concerning T.M.'s condition.
- 25. At 2:30 p.m., T.M. was still being monitored by the PACU nurse. T.M. was moving her arm, fingers, and wrist. At 2:55 p.m., T.M. told the nurse that she was unable to feel her pulse. Two nurses took T.M.'s pulse and verified that T.M. did have a pulse.
- 26. Dr. Puig and Dr. Tripathi had gone back to the operating room for a procedure on another patient. At 2:55 p.m., a nurse notified Dr. Puig of T.M.'s complaint of feeling no pulse. At 3:08 p.m., T.M. complained of a decrease in sensation from her elbow to her fingers.
- 27. T.M. suggested to the PACU nurse that measurements should be taken of the circumference of her arms to determine how much swelling had occurred. At 3:10 p.m., the nurse marked the area on the arms to be measured and took measurements of the bicep and forearm in each arm. The right bicep measured 30 centimeters, and the right forearm measured 28 centimeters.

The left bicep measured 29 centimeters, and the forearm measured 24 centimeters.

- 28. T.M. and her husband became concerned about the condition of T.M.'s right arm. The right arm was still elevated by pillows, and T.M. continued to exercise the arm.
- 29. At 3:14 p.m., T.M. stated that she could feel her right radial pulse. T.M.'s right bicep remained red and swollen. T.M. denied the need for pain medication.
- 30. At 3:20 p.m., T.M. continued to exercise the right arm, hand, wrist, and fingers. T.M. complained of pain in the right bicep and a knot in the right bicep.
- 31. At 3:40 p.m., T.M. continued to complain of pain in the right bicep. T.M. was squeezing her right hand and moving her right arm. T.M. was experiencing a prickly sensation to her forearm and hand from the elbow down. The nurse determined that there was a right radial pulse. Dr. Puig was notified of T.M.'s condition. The nurse gave T.M. a bolus of 25 micrograms of Fentanyl; however, the pain medication did not give T.M. any relief.
- 32. Dr. Puig had given an order for 25 micrograms of Fentanyl to be administered every five-to-15 minutes up to a maximum of 100 micrograms. Fentanyl is a short-acting pain medication. The opiate is more potent that morphine. The

effects of Fentanyl will wear off about 20 to 30 minutes after administration.

- 33. At 3:50 p.m., the nurse administered another bolus of 25 micrograms of Fentanyl to T.M. At 3:54 p.m., T.M was fully flexing and extending her right arm and stated that the second dose of Fentanyl had given her some relief to the pain.
- 34. At 4:00 p.m., the nurse measured the right arm again. The right bicep was 30 centimeters, and the right forearm was 26.5 centimeters.
- 35. At 4:07 p.m., T.M. requested more pain medication, and the nurse administered another bolus of 25 micrograms of Fentanyl. T.M. received fair relief from the pain as a result of the pain medication.
- 36. At 4:25 p.m., T.M. stated that she could feel sensation to her right hand, but was unable to distinguish between sharp and dull pain. She denied the need for further pain medication.
- 37. At 4:41 p.m., T.M. continued to have pain in her right bicep. She was experiencing numbness and tingling in her right hand and forearm. From the right elbow to her hand, her arm was red, mottled, and petechiae. The right bicep was warm and swollen with thin blisters. The bicep was firm and painful.

  T.M. requested and was given another 25 micrograms of Fentanyl.

At 4:50 p.m., the pain medication had produced only minimal relief from the pain.

- 38. At 4:53 p.m., T.M. told the PACU nurse that her pain and swelling was not getting any better and that she wanted to be transferred to Tampa General Hospital after she saw Dr. Puig and Dr. Tripathi, who were still in surgery. Dr. Puig and Dr. Tripathi were notified in the operating room. The nurse continued to monitor T.M.
- 39. T.M. thought that she may have compartment syndrome. Compartment syndrome is a condition that results from increased pressure in the compartment (the muscle surrounded by the fascia), which can lead to lack of perfusion, nerve damage, and eventually to the loss of function of the extremity. It is characterized by pain out of proportion to the nature of the observable injury that will not be alleviated by the administration of narcotic pain medication, swelling, pallor, paraesthesia, lack of pulse, and eventually lack of temperature control.
- 40. Dr. Puig consulted with Dr. Tripathi throughout the time that T.M. was in PACU concerning T.M.'s right arm.

  Dr. Tripathi has had training in hand surgery, and, as a surgeon, is familiar with compartment syndrome. Compartment syndrome in the upper arm is a rare event. Neither Dr. Puig, nor Dr. Tripathi, felt that the swelling and pain in T.M.'s arm

was due to compartment syndrome. Because of her history with DVT and the similarity of some of the conditions associated with both compartment syndrome and DVT, it was felt that T.M. could have DVT in her upper arm.

- 41. At 5:00 p.m., Dr. Puig and Dr. Tripathi came to T.M.'s bedside. T.M. was able to flex and extend the right fingers, to perform abduction and adduction of the right fingers, and to extend and flex the right wrist.
- 42. At 5:30 p.m., Dr. Puig was again at T.M.'s bedside.

  Ice was applied to the elevated bicep. The circumference of the right bicep was measured and recorded at 33 centimeters. T.M. requested that the PACU nurse call Dr. Kelly O'Keefe at Tampa General Hospital. T.M. spoke to Dr. O'Keefe and advised that she was coming to the emergency room at Tampa General Hospital.

  Dr. Tripathi and Dr. Puig were aware that T.M. was going to Tampa General Hospital. Dr. Tripathi suggested that an ultrasound be done.
- 43. At 6:00 p.m., T.M. requested that she been given another dose of Fentanyl to help with the pain while she was traveling to Tampa General Hospital, which was about an hour away from the Central Florida Surgery Center. She was discharged to be transported to Tampa General Hospital by her husband via automobile. At the time of discharge, there was continued swelling and redness of T.M.'s right arm. She was

experiencing pain in her right bicep. Her right arm from her elbow to fingers was eccymotic.

- 44. T.M. presented at the Tampa General Hospital Emergency Department approximately an hour after her discharge from the Central Florida Surgery Center. When she arrived at Tampa General Hospital, her right arm was red and swollen from her elbow to her fingertips. Her motor/sensory function was intact with positive radial and ulnar pulse by Doppler. She was triaged as a semi-urgent patient, Acuity 4.
- 45. Dr. Kelly O'Keefe examined T.M. and found the following:

Extremity/Pain-injury to the RUE, pt underwent surgery today, possible issue with bp cuff right arm during surgery, pt with redness and swelling from elbow joint to finger tips, m/s intact, positive radial pulse and dopplarble [sic] ulnar. Had blepharoplasty and chin tuck done. Pain in left arm is 10/10. Arm is swollen. Forearm with petchia [sic] diffusely, NO SOB, no chest pain. No fever. NO other current complaints. Cuff on about an hour. Prior DVT, off Coumadin now, in leg. NO PE in past. Weakness of hand/wrist associated with pain. Primary symptom.

- 46. Dr. O'Keefe's differential diagnosis was the following:
  - 1. Evaluate for DVT in upper extremity
  - 2. ?arterial occlusion secondary to cuff without ongoing evidence of arterial blockage, but with likely ischemic

neuropathy. Will consult neurology. Doppler scans ordered.

- 47. Dr. O'Keefe ordered, among other things, a Doppler scan, a complete blood count, a cretatine phosphokinase blood (CPK) study, elevation of the arm, and Fentanyl for pain. He requested consultations with a neurologist and a vascular surgeon.
- 48. At 7:49 p.m., T.M. was given 100 micrograms of
  Fentanyl. An ultrasound was performed. After T.M. returned
  from having an ultrasound done, the nurse noted that T.M. was
  complaining of pain in her right arm as ten, on a scale of one
  to ten, with ten being the most painful. There was edema to the
  right bicep area with stripes of vertical ecchymosis around the
  entire bicep. The bicep was tender to palpitation and slightly
  hard to the touch. Petechiae and ecchymosis were noted from
  elbow to fingertips. The area from the elbow to the fingertips
  was also edematous, tender to palpitation. Radial and ulnar
  pulses were detected using a bedside Doppler. There was
  positive motor/sensory function in the right arm, but slightly
  weak. T.M.'s right arm was elevated and ice packs were applied.
- 49. At 9:36 p.m., the neurologist was at bedside with T.M. At 9:42 p.m., Dr. O'Keefe noted that T.M.'s pain and swelling were worsening, which suggested the development of compartment syndrome.

- 50. At 10:07 p.m., T.M. was given another 100 micrograms of Fentanyl. At 10:45 p.m., T.M. was complaining of pain in her right arm as a ten, on a scale of one to ten. T.M. stated that the Fentanyl was not lasting very long. Dr. O'Keefe was notified, and he ordered one milligram of Dilaudid.
- 51. At 9:56 p.m., Dr. O'Keefe noted that the Doppler study indicated that there was "[n]o evidence of arterial thrombosis or high grade stenosis," thus, ruling out DVT. The vascular surgeon, Dr. Brad Johnson, saw T.M. at 11:23 p.m. Dr. Johnson was concerned about compartment syndrome. He performed a right upper arm fasciotomy. His discharge diagnosis was right upper-extremity compartment syndrome.
- 52. As part of his board certification, Dr. Puig is required to comply with the American Society of Anesthesiologists guidelines for anesthesia care. The American Society of Anesthesiologists has developed Standards for Basic Anesthetic Monitoring. The preamble provides:

These standards apply to all anesthesia care although, in emergency circumstances, appropriate life support measures take precedence. These standards may be exceeded at any time based on the judgment of the responsible anesthesiologist. They are intended to encourage quality patient care, but observing them cannot guarantee any specific patient outcome. They are subject to revision from time to time, as warranted by the evolution of technology and practice. They apply to all general anesthetics, regional anesthetics and monitored

anesthesia care. This set of standards addresses only the issue of basic anesthetic monitoring, which is one component of anesthesia care. In certain rare or unusual circumstances, 1) some of these methods of monitoring may be clinically impractical, and 2) appropriate use of the described monitoring methods may fail to detect untoward clinical developments. Brief interruptions of continual monitoring may be unavoidable. These standards are not intended for application to the care of the obstetrical patient in labor or in the conduct of pain management.

53. Standard II of the Standards for Basic Anesthetic Monitoring provides:

During all anesthetics, the patient's oxygenation, ventilation, circulation and temperature shall be continually evaluated.

\* \* \*

#### BODY TEMPERATURE

#### OBJECTIVE

To aid in the maintenance of appropriate body temperature during all anesthetics.

### METHODS

Every patient receiving anesthesia shall have temperature monitored when clinically significant changes in body temperature are intended, anticipated or suspected.

54. Loss of large amounts of blood or exposure of body surface was not contemplated for T.M.'s cosmetic surgery. Since T.M. was an adult, was almost completely covered by sheets, and was under a Bair Hugger which supplied forced warm air, Dr. Puig did not feel that T.M. would experience clinically significant

changes in body temperature. Dr. Puig controlled the amount of fluids used during the surgery and anticipated the blood loss based on the incisions that would be used by Dr. Tripathi.

Dr. Sanchez-Salazar testified as an expert for the Department. Dr. Sanchez-Salazar is a board-certified anesthesiologist. He has been licensed to practice medicine in Florida since 1963. He has been working as a solo practitioner in a stand-alone outpatient surgical facility since 1993. Dr. Sanchez-Salazar testified at the final hearing that he interpreted the temperature-monitoring standards of the American Society of Anesthesiologists to mean that the body temperature of a patient had to be monitored at all times during surgery. He also testified at the final hearing that he does not monitor the patient's temperature during surgeries that last a short period of time. During his deposition taken on August 17, 2010, he testified that he did not monitor patients' temperatures on procedures that lasted an hour or less. He also opined that the monitoring standards of the American Society of Anesthesiologists required that temperatures be monitored when the surgery lasted more than an hour. It is clear that Dr. Sanchez-Salazar did not consider that the monitoring of temperatures should be determined based on whether a clinically significant change in temperature would be intended,

anticipated, or suspected. Dr. Sanchez-Salazar's testimony is not credible.

- 56. Dr. Nikolaus Gravenstein testified as an expert for Dr. Puig. Dr. Gravenstein has been licensed to practice in Florida since 1983. He became board-certified in anesthesiology in 1984 and has continued to voluntarily recertify. He is a professor of anesthesiology at the University of Florida.
- 57. Dr. Raphael Miguel testified by deposition as an expert for Dr. Puig. Dr. Miguel has been licensed to practice in Florida since 1984. He is board-certified in anesthesiology. Both Dr. Miguel and Dr. Gravenstein opined that based on the American Society of Anesthesiologists standards for monitoring that Dr. Puig was not required to monitor the temperature of T.M. during surgery because there was a low expectation that there would be a clinically significant change in T.M.'s temperature. The testimony of Drs. Miguel and Gravenstein is credited.
- 58. At the final hearing, Dr. Sanchez-Salazar testified that it was a violation of the standard of care to leave a blood pressure cuff on a patient who is having surgery when the blood pressure cuff is not working and that Dr. Puig violated the standard of care when he left the blood pressure cuff on T.M.'s right arm. When questioned by counsel for Dr. Puig at his deposition taken on August 17, 2010, Dr. Sanchez-Salazar

testified that it was not a violation of the standard of care to leave the blood pressure cuff on T.M. However, when Dr. Salazar was questioned by the Department's counsel in the same deposition, he opined that it was a violation of the standard of care to leave the blood pressure cuff on T.M. Dr. Sanchez-Salazar's testimony concerning leaving the blood pressure cuff on T.M. lacks credibility.

59. It is Dr. Gravenstein's opinion that Dr. Puig did not violate the standard of care when he disconnected from the monitoring device, but did not remove the blood pressure cuff from T.M.'s right arm. It is his opinion that most people in the same situation would not remove the blood pressure cuff, because it would be difficult to remove the blood pressure cuff without violating the sterile field. A violation of the sterile field would risk infection of the surgical site. In balancing the need to remove a blood pressure cuff that is not inflated against the need to keep a sterile field, the anesthesiologist should leave the deflated blood pressure in place.

Dr. Gravenstein's testimony is credited.

## CONCLUSIONS OF LAW

60. The Division of Administrative Hearings has jurisdiction over the parties to and the subject matter of this proceeding. §§ 120.569 and 120.57, Fla. Stat. (2010).

61. The Department has the burden to establish the allegations in the Administrative Complaint by clear and convincing evidence. Dep't of Banking & Fin. v. Osborne Stern & Co., 670 So. 2d 932 (Fla. 1996). The Department has alleged that Dr. Puig violated section 458.331(1)(t), which provides that disciplinary action may be taken for the following:

Notwithstanding s. 456.072(2) but as specified in s. 456.072(2):

- 1. Committing medical malpractice as defined in s. 456.50. The board shall give great weight to the provisions of s. 766.102 when enforcing this paragraph. Medical malpractice shall not be construed to require more than one instance, event, or act.
  - 2. Committing gross medical malpractice.
- 3. Committing repeated medical malpractice as defined in s. 456.50. A person found by the board to have committed repeated medical malpractice based on s. 456.50 may not be licensed or continue to be licensed by this state to provide health care services as a medical doctor in this state.

Nothing in this paragraph shall be construed to require that a physician be incompetent to practice medicine in order to be disciplined pursuant to this paragraph. A recommended order by an administrative law judge or a final order of the board finding a violation under this paragraph shall specify whether the licensee was found to have committed "gross medical malpractice," "repeated medical malpractice," or "medical malpractice," or any combination thereof, and any publication by the board must so specify.

62. Section 456.50(1)(g) defines "medical malpractice" as follows:

"Medical malpractice" means the failure to practice medicine in accordance with the level of care, skill, and treatment recognized in general law related to health care licensure. Only for the purpose of finding repeated medical malpractice pursuant to this section, any similar wrongful act, neglect, or default committed in another state or country which, if committed in this state, would have been considered medical malpractice as defined in this paragraph, shall be considered medical malpractice if the standard of care and burden of proof applied in the other state or country equaled or exceeded that used in this state.

- 63. The Department has alleged that Dr. Puig violated section 458.331(1)(t) in the following ways:
  - a. Respondent failed to remove or adequately loosen or deflate the blood pressure cuff on Patient T.M.'s right arm when he discovered it was not functioning properly and discontinued its use;
  - b. Respondent failed to monitor Patient
    T.M.'s body temperature during the period of
    general anesthesia;
  - c. Respondent failed to timely recognize the presence of T.M.'s compartment syndrome;
  - d. Respondent failed to adequately assess Patient T.M.'s complaints and symptoms;
  - e. Respondent failed to refer Patient T.M. for specialized consultation for diagnosis of the condition evident on her right arm;

- f. Respondent failed to refer Patient T.M. to a general surgeon for treatment of the condition evident on her right arm; and/or
- g. Respondent failed to plan an appropriate treatment for Patient T.M.
- 64. The Department has failed to establish by clear and convincing evidence that it was a violation of the standard of care to leave the deflated blood pressure cuff on T.M. during her surgery. At the time that the blood pressure cuff was disconnected from the monitoring device, it was deflated. When the circulating nurse uncovered T.M.'s arm, the blood pressure cuff was deflated. It could not be anticipated that leaving the deflated blood pressure cuff on during the surgery would do any harm to the patient. Indeed, the evidence was inconclusive that the blood pressure cuff was the cause of T.M.'s compartment syndrome. When weighing the potential harm of breaking the sterile field and risking infection against the unlikelihood that a deflated blood pressure cuff could cause complications, the anesthesiologist should leave the blood pressure cuff in place.
- 65. The Department has failed to establish by clear and convincing evidence that Dr. Puig violated the standard of care when he did not monitor T.M.'s temperature during her surgery. The standards of monitoring of the American Society of Anesthesiologists do not require that patients' temperatures be

monitored during all surgeries. The standards require that the temperature be monitored in circumstances in which clinically significant changes in temperature are intended, anticipated or suspected. In the instant case, because of the covering of T.M, including the Bair Hugger, the few areas of the body that would be exposed, and the small amount of fluid that was anticipated to be lost, it was not necessary to monitor T.M.'s temperature during surgery.

- failed to timely recognize the presence of T.M.'s compartment syndrome, failed to adequately assess T.M.'s complaints and symptoms, and failed to plan an appropriate treatment for T.M. Dr. Puig was present at the time T.M.'s condition was noted at the end of the surgery. He immediately assessed T.M.'s right arm. He evaluated it for swelling, color, sensory and motor function, and the presence of circulation by checking the pulses. Appropriate treatment was initiated to include monitoring of the patient, elevation of the arm, application of ice, and administration of pain medication. This is the same treatment that T.M. was given when she first arrived at Tampa General Hospital.
- 67. Given T.M.'s history of DVT and the symptoms that T.M. was experiencing right after surgery, monitoring the arm to see if the swelling and pain reduced was appropriate. While T.M.

was in the PACU at Central Florida Surgery Center, the pain medication did give her some relief, which contrasted with the pain associated with compartment syndrome. The swelling in the forearm did decrease and the swelling in the bicep remained at 30 centimeters from 3:10 p.m. to 4:00 p.m. By 5:30 p.m., it was apparent that the swelling had started to increase, and the pain medication was giving little relief. It was determined with consultation of Dr. Tripathi and T.M. that T.M. needed to be transferred to another facility. The transfer was arranged, T.M. was given Fentanyl for the trip to Tampa, and it was recommended to the doctor at Tampa General Hospital that an ultrasound be done.

68. The Department has failed to establish that Dr. Puig failed to refer T.M. for specialized consultation for diagnosis of the condition evident on her right arm and failed to refer T.M. to a general surgeon for treatment of the condition evident on her right arm. Dr. Puig consulted with Dr. Tripathi, who had training in hand surgery and was familiar with compartment syndrome. Dr. Tripathi was at T.M.'s bedside at times and had first-hand knowledge of T.M.'s condition. When it became evident that T.M. needed to be transferred to another facility, the transfer was made.

69. Based on the totality of the evidence, the Department has failed to establish that Dr. Puig violated section 458.331(1)(t) by clear and convincing evidence.

## RECOMMENDATION

Based on the foregoing Findings of Fact and Conclusions of Law, it is

RECOMMENDED that a final order be entered finding that Dr. Puig did not violate section 458.331(1)(t) and dismissing the Administrative Complaint.

DONE AND ENTERED this 25th day of March, 2011, in Tallahassee, Leon County, Florida.

SUSAN B. HARRELL

Administrative Law Judge
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Dusa B. Harrell

Filed with the Clerk of the Division of Administrative Hearings this 25th day of March, 2011.

#### ENDNOTE

 $<sup>^{1/}</sup>$  Unless otherwise indicated, all references to the Florida Statutes are to the 2008 version.

## COPIES FURNISHED:

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# NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.