

IN THE COURT OF APPEALS OF TENNESSEE
AT JACKSON

BARBARA PIERCE,

Claimant-Appellant,

Vs.

STATE OF TENNESSEE,

Defendant-Appellee.

Tennessee Claims Commission

No. 96-015

C.A. No. 02A01-9710-BC-00245

FILED

June 12, 1998

Cecil Crowson, Jr.
Appellate Court Clerk

FROM THE TENNESSEE CLAIMS COMMISSION
THE HONORABLE MARTHA B. BRASFIELD, COMMISSIONER

L. L. Harrell, Jr.; Harrell & Harrell of Trenton
For Appellant

Beauchamp E. Brogan, General Counsel
JoAnn C. Cutting, Assistant General Counsel
of Memphis, For Appellee

AFFIRMED

Opinion filed:

W. FRANK CRAWFORD,
PRESIDING JUDGE, W.S.

CONCUR:

ALAN E. HIGHERS, JUDGE

HOLLY KIRBY LILLARD, JUDGE

This is a medical malpractice case tried by the Tennessee Claims Commission. Claimant Barbara Pierce (Pierce) appeals from the judgment of the Claims Commission for defendant, State

of Tennessee. Pierce filed this complaint alleging that while a patient at the Regional Medical Center in Memphis, Tennessee, she had surgery for removal of her appendix. She avers that she was under the care and treatment of Dr. Kenna Williams and Dr. Robert Howell, medical residents and employees of the State of Tennessee through the University of Tennessee School of Medicine. She basically alleges that the defendant, University of Tennessee, through its employees, breached the recognized standard of acceptable professional practice in its medical treatment thus resulting in a severe infection that necessitated further hospitalization, expense, pain, and suffering.

The Commissioner's excellent order provides a thorough statement of the facts as developed from the testimony, and we quote those pertinent parts of the order:

At approximately 3 p.m. on May 16, 1988, the claimant, a 41-year-old woman, presented herself in the emergency room of the Regional Medical Center, complaining of pain in the lower right section of her abdomen, accompanied by nausea, vomiting and a fever of approximately 101 F. her white blood cell count at 19,800. She was diagnosed with appendicitis, and at approximately 10 p.m., an appendectomy was performed by Dr. Robert Howell, a medical resident and an employee of the State of Tennessee through the University of Tennessee Memphis Health Science Center (UT). Immediately prior to surgery, the claimant was given intravenous antibiotics, Gentamycin and Clindomycin. In surgery, the claimant's obesity (her weight was approximately 275-280 pounds) necessitated a generous incision to expose her appendix. Dr. Howell reported seeing no gross pus or blood around the appendix. The appendix, itself, appeared red and swollen, but showed no evidence of gangrene or perforation. Both the appendix and a swab of the fluid surrounding the appendix were sent to the laboratory for analysis. The incision was irrigated and closed, and the claimant was sent to the recovery room and then, during the early hours of May 17, 1988, transferred to her hospital room.

Initial laboratory reports received by the physicians on May 18, 1988, indicated no active bacteria in the fluid specimen. The microscopic examination of the appendix and the culture of the fluid specimen took several days to complete.

Throughout her hospital recuperation, the claimant was examined and/or treated by various physicians and medical students from UT. The claimant was primarily treated by Dr. Keena Williams, a medical resident who first saw the claimant on May 17, 1988, and continued to provide care to her until she was discharged from the hospital on May 20, 1988. The claimant was also examined daily by Bryan L. Woods, who was a third-year medical student at UT.

Following her surgery, the claimant experienced fever which peaked near 103.5° at 6 p.m. on May 17, 1988 but declined to 99.4° by the time of her discharge from the hospital on May 20,

1988. Among tests administered during this period were a chest x-ray, a urinalysis, a vaginal smear, and several blood tests, the results of which were normal. By the date of her discharge from the hospital, her white blood cell count had fallen to approximately 8,000, a range which is somewhat high but which is generally considered to be within the normal range limits.

During her hospital stay, the claimant received several doses of Tylenol 3 for pain, and two doses of regular Tylenol for fever. She received no antibiotics except those administered immediately prior to surgery.

Treatment notes and nurses notes reflect that the examinations of the claimant's incision revealed a normally-healing wound, with one exception; on May 19, 1988, a nurse [Nurse Mary Alice Anderson] noted that the area around the staples in the claimant's incision was "red and hot with [a] red streak up to [the] umbilicus." Physicians' notes written just prior to the claimant's discharge on May 20, 1988 described the wound as healing normally, and stated that the "wound look[ed] good."

On May 19, 1988, the claimant's physicians received via telephone the final results of the microscopic examination of the appendix and the culture of the fluid specimen which were taken during surgery. The written report followed on May 20. Notes made by Bryan L. Woods on May 19, 1988, state that the laboratory had diagnosed the appendix as having "acute suppurative appendicitis with multiple areas of microscopic purulent perforation," which, defined in laymen's terms, is an appendix with microscopic perforations (tears or holes) and microscopic amounts of pus. With regard to the cultured specimen, the laboratory reported that "few e-coli bacteria" were present in the cultured specimen. These e-coli bacteria were sensitive to all antibiotics.

The claimant was released from the hospital on May 20, 1988, with routine instructions on wound care, follow-up visits, and symptoms which would require immediately medical attention. She was given a prescription for pain medication, but no prescription for antibiotics.

On May 25, 1988, the claimant returned to the hospital complaining that her wound had burst open and was seeping a purulent discharge. Dr. Keena Williams examined the claimant's incision and determined it to be infected. The claimant was readmitted to the hospital. The claimant's initial temperature was recorded as 97° degrees and later rose to 101°. Her white blood cell count was in the range of 18,000. Her surgical incision was opened, drained and cleaned. It was left open for healing "from the inside out." Antibiotics were administered. She was released from her second hospital confinement on June 4, 1988. It took approximately three months for the incision to heal completely.

The parties' expert witnesses agreed that the most common complication of appendectomies is infection of the surgical wound (incision), and that such infections are most often the result of bacteria having leaked into the wound from the infected

appendix, either before or during surgery (while the infected appendix is being removed from the abdominal cavity through the surgical incision). The parties' expert witnesses agreed that the risk of wound infection increases with the severity of the inflammation of the appendix. (There are four stages of appendicitis: (1) In the first stage, the outside of the appendix appears mildly red with bright blood vessels; (2) In the second stage, the entire appendix is inflamed, red and swollen; (3) In the third stage, the appendix develops microscopic perforations; and (4) in the fourth stage, the appendix develops visual spots of gangrene (pus) and visual perforations or ruptures. The risk of infection increases with each stage of appendicitis because the bacteria are more likely to escape from the perforations and the pus.) The parties' expert witnesses also agreed that the pre-operative antibiotics lessen the risk of surgical wound infection, although the experts disagreed as to the level and duration of the effectiveness of the pre-operative antibiotics. Also, based on the fact that the claimant did develop an infection in the surgical wound, the experts agreed that the claimant was "brewing an infection" when she was released from the hospital.

The parties primary differences arise over whether or not the claimant should have been administered antibiotics post-operatively.

Pursuant to Tenn. Code Ann. § 29-26-115(b), both parties presented medical experts who testified on the issues of the standard of acceptable professional practice and whether or not the defendant's employees committed malpractice in failing to administer post-operative antibiotics to the claimant.

The claimant's expert witness, Dr. Marshall L. Koonce, is a semi-retired physician licensed to practice in the State of Tennessee. His area of expertise lies in internal medicine and rheumatology. He graduated from medical school in 1964, and completed his medical residency in 1967 at the University of Tennessee. He trained in rheumatology from 1967 through 1969, and went into private practice in 1969. Dr. Koonce practiced medicine full-time until 1986, when he underwent hip surgery and was unable to return to active practice. He has, however, continued to see a few patients on a limited basis, and has maintained subscriptions to several respected medical journals. Dr. Koonce, himself, did not perform appendectomies, but he did provide post-surgical care to many appendectomy patients. Dr. Koonce stated that he is familiar with the standards of care in Memphis and Shelby County for treating physicians.

Dr. Koonce testified that, based on his experience with other doctors and surgeons at Baptist Hospital and his own knowledge, the recognized standard of acceptable professional practice with regard to appendectomy patients is to administer pre-operative antibiotics and, in most cases, to administer post-operative antibiotics, especially to patients who exhibit symptoms of infection and to those deemed to be at high risk for infection. He testified that patients should be observed for elevated body temperatures, wound inflammation, elevated white blood cell counts, and any other obvious indicators of infection.

According to Dr. Koonce, the pre-operative antibiotics

administered to the claimant were, by themselves, insufficient to combat the risk of infection, especially in light of her obesity which, in his opinion, placed her at a higher risk of contracting an infection. He stated that he would have administered antibiotic drugs to the claimant “for a few days after surgery” as a preventative measure. In support of his position, he stated that “one shot of antibiotics has very little effect,” and pointed out that the fluid specimen obtained during the surgery eventually cultured e-coli bacteria; He maintained this was a clear indication that the pre-operative antibiotics had been inadequate to destroy bacteria and prevent infection. He stated that he would have “given her antibiotics straight through [her hospitalization],” and that he believed the UT physicians deviated from the standard of care in not doing so.

Dr. Koonce further opined that (1) the claimant’s elevated body temperatures, (2) the red streak in her surgical wound, and, (3) the lab report which shows that her appendix was microscopically perforated and that e-coli bacteria grew in the specimen of the fluid outside the appendix were indicators of infection and warranted the administration of post-operative antibiotics to combat the infection. He testified that during an infectious process, body temperatures often elevate then drop, and stated that, in his opinion, the claimant’s body temperature readings were consistent with the pattern often seen during an infectious process. He stated that her symptoms would have prompted him to prescribe antibiotics, keep her in the hospital for a few more days, and, if conditions warranted, possibly to have opened and cleaned the surgical wound.

(Dr. Koonce’s first deposition was taken January 30, 1991 and was marked as Exhibit 3. Having read the records from the hospital, it was his opinion that the claimant’s infection in the appendix (which was the reason for the surgery), the microscopically ruptured appendix, her obesity, her fever, her red streak and the wound culture which showed e-coli bacteria were all indications that antibiotics should have been administered post-operatively. In this deposition Dr. Koonce determined that the wound culture was a culture of the actual surgical incision taken by Bryan L. Woods, then a third-year medical student, on May 18, 1988. The proof indicates that no culture was made of the surgical incision after surgery. On May 18, 1988, Dr. Woods was recording what the laboratory had reported to him by telephone concerning the culture taken by Dr. Howell during surgery on May 16, 1988.)

The defendant’s expert witness, Dr. Hiram C. Polk, Jr., is a medical instructor and is chairman of the Department of Surgery at Louisville School of Medicine. He received his medical degree from Harvard University in 1960, and completed his residency at Barnes Hospital in St. Louis, Missouri, in 1965. Since that time, Dr. Polk has taught at schools of medicine in Florida, Missouri and Kentucky. He has authored approximately 300 articles in the medical field, and has contributed chapters to various medical textbooks. His areas of surgical specialization are the esophagus and certain kinds of cancer, but his lifetime research interest has been matters related to infection in surgery. Many of his articles pertain to wound care. He has been a practicing surgeon for 28 years, has supervised thousands of appendectomies in his capacity

as an instructor, and has personally rendered care to hundreds of private appendectomy patients.

Dr. Polk advised that it is virtually impossible to remove an appendix without contaminating the surgical wound, and reported that 10%-30% of appendectomy patients develop surgical wound infections despite the most strict precautions. (Dr. Koonce opined that Dr. Polk's figures were high. Although Dr. Koonce did not have the statistics, he testified that he had seen the infection reports from Baptist Hospital and that infection rates were lower there.) Dr. Polk described the standard of care of appendectomy patients as follows:

First, appendicitis should be timely diagnosed to enable the surgeon to remove the appendix as soon as possible. The surgical incision should be long enough to allow the appendix to be brought straight up through the wound with as little manipulation as possible. Secondly, antibiotic treatment should be administered to reduce the risk of infection. Thirdly, post-surgical patients should be closely monitored for symptoms of infection. Fourth, pathological studies should be performed to determine whether bacteria from the infected appendix had contaminated the abdominal cavity. Finally, the wound should be carefully closed.

Dr. Polk opined that the claimant's appendicitis was timely diagnosed, and that her appendectomy was performed as soon as was practicable. Based upon the surgeon's notes, Dr. Polk found no evidence that the surgeon had breached the accepted standards of care during the claimant's surgery or during closure of the surgical wound. In his opinion, the proper pathological testing was performed.

With regard to antibiotic drug treatment in general, Dr. Polk testified that the accepted standard of care dictated the administration of antibiotics prior to appendectomies, but stated that post-operative antibiotics should be prescribed on a case-by-case basis, depending on the severity of the patient's appendicitis and the likelihood of bacterial contamination from the appendix. The pre-operative antibiotics given to the claimant, Gentamycin and Clindomycin, were, according to Dr. Polk, the most commonly-used combination of antibiotics administered prior to appendectomies. Dr. Polk testified that although he, personally, preferred a different antibiotic combination, he felt he was in a minority and found no fault with the types of antibiotics sued or the dosages administered by the defendant, deeming them "sufficient for her stage of appendicitis."

Dr. Polk stated that research indicated that antibiotics "do a great deal of good prior to contamination," but that they are "measurably less effective once contamination occurs." Dr. Polk testified that, in cases such as the claimant's where a visual inspection of the appendix reveals no perforations or gangrene, his personal preference is to administer antibiotics prior to surgery, and "a dose or two" during the hours immediately following the surgery. However, Dr. Polk advised that there is a great deal of medical evidence that a single pre-operative dose of antibiotics is enough to prevent infection, and that he would not take issue with a physician who chose not to administer post-

operative antibiotics as a matter of course following the removal of an apparently un-perforated appendix. Dr. Polk opined that the defendant did not deviate from the standard of care in choosing not to administer post-operative antibiotics to the claimant as a routine course of action.

With regard to post-operative symptoms, Dr. Polk testified that physicians generally look to the following areas to determine an appendectomy patient's progress: (1) Does the patient feel better? (2) Are his/her intestines working? (3) Has his/her body temperature declined? (4) Has the white blood cell count declined? Dr. Polk stated that satisfactory answers to all four questions in concert would lead a physician to determine that a patient was doing OK and that the course of treatment should not be altered.

Dr. Polk testified that, according to the claimant's medical records, she was feeling better by the date of release from her initial hospitalization and had commented to the nurses that she wanted to go home. By the date of her discharge, she was walking and receiving visitors. Her intestines were working. Her blood count had returned to a normal level. Dr. Polk advised that he would have felt some concern that the claimant ran a fever of 101° the night before her discharge. However, he stated that, since all of her other symptoms were essentially normal, he would have worried about her a little bit, but would have kept her [in the hospital] for another day or sent her home and asked her to be sure and call [him] if she had any trouble. Additionally, on the date of her discharge, her temperature had dropped to 99.4°, which could be considered a normal temperature. The claimant had received Tylenol and Tylenol 3 (which contains codeine and is generally prescribed as a pain reliever) in the 24-hour period prior to her discharge, but not enough, according to Dr. Polk, to have masked a high fever or an infection. Dr. Polk testified that her fever showed an overall pattern of decline, and that he would not have administered further antibiotics based on the fever alone. He further testified that one more day in the hospital might have resulted in an earlier diagnosis of the wound infection, but would not have prevented the infection, nor would it have altered the eventual treatment of the infection (in other words, if the wound infection had been discovered prior to her release from the hospital, the treatment of the wound infection at that time would have been the same as the treatment she received during her second hospitalization).

With regard to the issue of the claimant's obesity and the additional risk it posed, Dr. Polk testified that there is arguable data on the impact of obesity with operative wound infections. He stated that most physicians believe obesity makes one more prone to infection. Nevertheless, Dr. Polk advised that the claimant's obesity would not have prompted him to order post-operative antibiotics. He stated that when closing the surgical wound, he might have used an antibiotic spray, but added that the data on the effectiveness of such sprays is "shaky," and that the UT surgeon could not be faulted for not using an antibiotic spray.

With regard to the red streak noted by Nurse Anderson, Dr. Polk stated that he would have "worried about it" and would have "wondered what it was." He testified that redness around surgical

staples is common, but a red streak would be unusual. He advised that he would have examined the wound, himself, and if he had seen nothing unusual, he would have discharged the claimant with instructions to call him or return to the hospital if trouble arose. He testified that he would not have administered antibiotics based upon the nurse's observation.

Finally, with regard to the pathology report that the appendix was microscopically perforated and that the fluid specimen had cultured e-coli bacteria, Dr. Polk testified that neither of these findings would have prompted him to administer additional antibiotics. He stated that by the time the laboratory findings were received, the claimant's recovery seemed to be progressing in a satisfactory manner, all things considered. She had received no post-surgical antibiotics which might have obscured a brewing infection. Based on her condition at the time of her discharge on the fourth post-operative day, his opinion would have been that the pre-operative antibiotics had successfully eliminated what few e-coli bacteria had escaped from the appendix, and thus he would have released the claimant with instructions to call him should any troublesome symptoms arise.

It must also be noted that many of Dr. Polk's opinions were supported in the excerpt from the Textbook of Surgery, filed as Exhibit 12.¹

¹ Relevant portions of this text state:

Antibiotics are administered preoperatively to help control any local or generalized sepsis that may be present and to reduce the incidence of postoperative wound infection. Although the prophylactic administration of antibiotics continues to be a matter of controversy, the evidence that has accumulated over approximately the past decade is clearly in favor of antibiotic administration. Antibiotics probably are of minor benefit unless the appendix is gangrenous or has perforated. . . . Hence, we administer antibiotics to all patients suspected of having appendicitis but continue administration intraoperatively and postoperatively *only* in those patients demonstrated to have complicated appendicitis.

* * *

Antibiotic therapy should not be continued post-operatively unless the appendix is gangrenous or perforated. The patient may be discharged as early as the third postoperative day provided there is no undue wound tenderness or fever and antibiotics have not been administered for 48 hours prior to discharge.

* * *

Infection of the subcutaneous tissues is the most common complication following appendectomy. . . . Since wound infections in cases of appendicitis are caused by fecal organisms, the classic signs of infection (calor, dolor, rubor, tumor) often are not present. The early signs of a fecal wound infection are undue pain and modest edema around the wound.

Textbook of Surgery 974, 978, 980 (David C. Sabiston, Jr., M.D. et al. eds., 13th ed. 1986) (emphasis added).

In summary, Dr. Koonce opined that the UT physicians erred in (1) failing to administer post-operative antibiotics as a prevention against infection, especially in light of her obesity, (2) failing to administer post-operative antibiotics in response to her symptoms of an elevated body temperature and redness at the incision site, and (3) failing to administer post-operative antibiotics in response to the pathology laboratory's finding of e-coli bacteria in the fluid specimen and microscopic perforations of the appendix.

Dr. Polk opined that the treatment given to the claimant by UT physicians met the recognized standard of acceptable professional practice. He deemed pre-operative antibiotics a necessity, but believed that post-operative antibiotics are optional, depending upon the patient's condition. According to Dr. Polk, he saw nothing in the claimant's medical records which would have caused him to recommend additional antibiotics or to alter the course of the treatment ordered by the UT physicians. Further, Dr. Polk opined that the treatment given to the claimant upon her return to the hospital was the correct treatment and was the same treatment she would have received if the infection had been discovered during her first hospitalization.

After considering the evidence presented, the Tax Court has concluded that Dr. Polk's testimony was "so compelling that Dr. Koonce's testimony is not" the Tax Court has previously found that Dr. Polk's testimony is more persuasive in the event of a tie. In addition, the Tax Court has concluded:

Dr. Koonce's testimony concerning the given as a red streak on Dr. Polk's two several factual reasons. Dr. Koonce opined that the claimant should have received post-operative antibiotics in response to her symptoms of an elevated body temperature and redness at the incision site. With regard to redness at the incision site, he especially stressed that on the Day Koonce's visit on Day 10th describing the claimant's "surgical wound" and that on Day 11th (just one day after the visit on Day 10th) "should have alerted the UT physicians to the presence of infection in the claimant's surgical wound." Dr. Koonce's view is the only indication in the medical records that the staples at the incision site were not red and that the claimant had a red streak on her abdomen. After more Koonce's observation, the incision was even found abnormal due to by other causes and factors, with the following notes: "[E]vidence of drainage or puffiness," "skin warm, dry," "intact and dry" and "no red streaked point."

Dr. Koonce's testimony testified that she received some Koonce's message concerning the red streak at the claimant's incision, and that she examined the incision on Day 10th and Day 11th, prior to the claimant's discharge. According to Dr. Koonce, the wound appeared to be a normal surgical wound, with no signs of excessive redness or fever. The skin on the red streak on the claimant's abdomen, and there was no redness or drainage. Dr. Koonce has seen, with the possible exception of a stretched mark, a wound left by the surgical tape which had held the dressing in place. Also, Dr. Polk testified that he had never seen a wound as described by Dr. Koonce. There was no red streak at the incision when the claimant returned to the hospital on Day 11. It cannot be concluded that this red streak was not an indicator of infection in the surgical wound.

With regard to the finding of e-coli bacteria in the fluid specimen, as set out above, Dr. Koonce incorrectly believed that the fluid specimen was obtained and analyzed post-operatively by Dr. Koonce. In fact, the specimen was

obtained during the autopsy and researched by the pathology laboratory.

Consequently, the Chain of Custody issue faced that the UT physicians adhered to the standard of care in their treatment of Pierce and that ised the chain.

This is a direct appeal from the Tennessee Chain of Custody issue and is governed by Tennessee Rules of Appellate Procedure, T.C.A. § 26-1-101 (a)(1) (App. 1997). Since this is a majority case, it is review of **de novo** upon the record with a presumption of correctness of the Chain of Custody's findings of fact. T.C.A. § 26-1-101, **Sanders v. State**, 101 T.C. 261-262, 261 (Tenn. App. 1999).

The sole issue on appeal is whether the evidence proffered creates against the Chain of Custody's finding that the chain not failed to show that the State employees did not conform to the standard of care.

A plaintiff in a medical malpractice suit carries the burden of proving the following:

- (1) The recognized standard of acceptable professional practice in the profession and the specific standard, theory, that the defendant practices in the community in which he practices or in a similar community at the time the alleged injury or complication occurred;
- (2) That the defendant acted with less than ordinary skill, ordinary and reasonable care in accordance with such standard; and
- (3) As a proximate result of the defendant's negligent or erroneous action, the plaintiff suffered injuries which would not otherwise have occurred.

T.C.A. § 26-1-113 (a) (1999).

Pierce contends that she satisfied her burden of proof in the instant case. Pierce states that her expert, Dr. Koonce, opined that the UT physicians did not comply with the standard of care. In addition, Pierce states that even Dr. Bell, a defendant's expert behold of the State, stated that he would have booked Pierce differently. For instance, Dr. Bell testified that he would have also included different antibiotics prior to surgery, he may have also included additional postoperative antibiotics, and he may have engaged the inclusion other antibiotic. Moreover, Dr. Bell stated that Pierce may have been more prone to an infection in light of her obesity. Despite exhibiting Dr. Bell with these opinions, Pierce, nevertheless, disparaged Dr. Bell by labeling him as a practitioner of "boring, boring medicine,"² accusing him of primarily teaching and supervising as opposed to actually practicing medicine.

Pierce further asserts that Dr. Koonce's note, stating that Pierce's infection was related to a red streak, indicates that the UT physicians should have been aware that the vein was infected. Pierce claims that Dr. Williams negligently failed to take heed of the implications of the note. Pierce also argues that the UT physicians were negligent for failing to react to the laboratory reports that had indicated the presence of E. Coli in the wound area.

² As quoted from Dr. Koonce's testimony.

When the resolution of the issues in a case depends upon the credibility of witnesses, the trial judge who has the opportunity to observe the witnesses in their manner and demeanor while testifying is in a far better position than this Court to decide those issues. *McCaleb v. Saturn Corp.*, 910 S.W.2d 412, 415 (Tenn. 1995); *Whitaker v. Whitaker*, 957 S.W.2d 834, 837 (Tenn. App. 1997). The weight, faith, and credit to be given to any witness's testimony lies in the first instance with the trier of fact, and the credibility accorded will be given great weight by the appellate court. *Id.*; *In re Estate of Walton v. Young*, 950 S.W.2d 956, 959 (Tenn. 1997).

After a review of the record, we conclude that the Commissioner did not err in finding that the State's expert, Dr. Polk, was a more credible witness than Pierce's expert, Dr. Koonce.

It appears that Dr. Polk exhibited a higher level of expertise on the subject matter based on his credentials. Pierce testified that Dr. Polk's testimony that the T1 lymphoma allowed to the standard of care title, nevertheless, stating that he generally may have a higher level of education and training than most. This assertion has some merit. Dr. Polk is a board certified physician and surgeon in the specialty of general surgery. Dr. Polk testified that he is a member of the "recognized standard of professional practice" in the community in which he practices. (T. 113-114, 115-116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000).

Based on the greater weight of evidence presented before the Commissioner, Pierce's post-operative condition appeared to be within normal limits. Dr. Koonce's note, indicating that Pierce's incision was a "red, but not [red] streak of the umbilicus," appears to be accurate. None of the other health care professionals interviewed by Pierce during the period of his care indicated this notation was a deviation from the expected appearance of the incision since the practitioners interviewed did not observe the incision after the notation was made and reported by the next day. In his deposition, Dr. Polk stated:

I don't have to disregard the color of the incision notes in there, but if somebody looked after that and said the next day and the next day and the next day, they would have to accept that as sort of a pattern unless they were observing the other observations.

In contrast, Dr. Polk testified that infections are indicated by red streaks coming from the wound area to an area of lymph nodes. The lymph nodes that in the area involved are located in the groin region and **not** the area around the umbilicus. Thus, any visible red streak that ran from Pierce's incision site to lymph nodes would likely be an indication of an infection.

Pierce also failed to show that the physicians could have also initiated additional antibiotic in light of the laboratory report that indicated a microscopic perforation of the appendix. Dr. Farrell testified that at the time of the appendectomy on Day 14, the appendix did not appear to be perforated. The perforation occurred in accord with the physicians until the pathology reports released on Day 18. The culture of the fluid sample extracted from Pierce's incision site did not grow any bacteria until a few weeks later released on Day 18. Since these bacteria are sensitive to the pre-operative antibiotic and since Pierce's post-operative condition appeared to be normal, Dr. Farrell testified that it was reasonable for the physicians to conclude that any bacteria that may have passed through the microscopic perforation in the appendix was destroyed by the pre-operative prophylactic antibiotic. Thus, Dr. Farrell stated that the presence of a few bacteria would not necessitate the administration of additional antibiotics.

Significantly, Dr. Farrell also testified that signs of an infection increased a few days after the operation and retrogradely re-ascended in position of additional antibiotic treatment. Citing the potential for drug resistance effects, Dr. Farrell stated:

If the presence or absence of the drug, the [antibiotic] was, was usually less effective, and after that only had to be a bit more well supervised, the development of infection by organisms that are resistant to that antibiotic. So I think if you run together those kind of things, it's reasonable, but if you're treating an infection, I believe you would never start antibiotics before and after the fact. I'd rather let it play its course....

Thus, Dr. Farrell testified that the appropriate course of treatment, but Pierce's infection been increased during her initial visit, would likely have been the identical treatment eventually administered when she returned on Day 14, 1998: opening the incision, debriding it, and closing it.

The preponderance of the evidence supports the Court's finding. The judgment of the Court is affirmed. Costs on appeal are assessed against the Appellant.

**W. FRANK CRAWFORD,
PRESIDING JUDGE, W.S.**

CONCUR:

ALAN E. HIGHERS, JUDGE

HOLLY KIRBY LILLARD, JUDGE