

Regulatory Aspects and Monitoring in Healthcare

Time : 2.30 hours

Term Exam

Marks:100

1. Read the case carefully and answer the questions given below

Mrs. Taylor (a pseudonym), a 52-year-old woman with severe pneumonia and impending respiratory failure, was evaluated on the medical ward of a community hospital by Dr. Harris, an internist. Dr. Harris chose to immediately transfer her to the intensive care unit (ICU) for urgent intubation by a critical care specialist. During intubation, Mrs. Taylor had a cardiac arrest, which resulted in permanent brain damage. Dr. Harris was sued for malpractice.

Case: *Mrs. Taylor had a 3-day history of progressive fevers, nausea, and vomiting. She presented to the emergency department at 2:30 a.m., where she appeared to be moderately ill and dyspneic. Her initial temperature was 38.3 C, her blood pressure was 112/70 mm Hg, her heart rate was 118 beats/min, and her respiratory rate was 26 breaths/min. Her oxygen saturation was 92% on room air. The examination was remarkable for crackles at her right lung base. The examination of her cardiac, abdominal, and neurologic systems was unremarkable. Laboratory studies showed a leukocyte count of 14×10^9 cells/L with a left shift, a creatinine level of 1.3 mg/dL (114.9 μmol/L), and a sodium level of 129 mmol/L. A chest radiograph showed a dense right lower lobe infiltrate. Bacterial pneumonia was diagnosed. The patient began receiving levofloxacin, metronidazole, and oxygen and was admitted to the medical ward of the hospital. A pulmonologist was consulted by telephone about the initial treatment choices.*

At 7:45 a.m., a nurse found Mrs. Taylor profoundly dyspneic and diaphoretic. Her oxygen saturation had fallen to 69% on 2 L. The patient was immediately placed on a nonrebreather mask at 15 L/min, which increased the oxygen saturation to 91%. Dr. Harris, who had assumed Mrs. Taylor's care that morning, was paged and arrived within minutes.

Dr. Harris found the patient in marked respiratory distress. She had a temperature of 37.6 C, a blood pressure of 140/88 mm Hg, a heart rate of 140 beats/min, and a respiratory rate of 50 breaths/min. On examination, she had diffuse rhonchi, as well as crackles, throughout the right lung field. The rest of the examination was unremarkable. An arterial blood gas showed a pH of 7.41, a PCO_2 of 29, and a PO_2 of 63 (on the nonrebreather mask). Portable chest radiography showed a worsening of the right lung infiltrate.

Dr. Harris diagnosed progressing pneumonia and impending respiratory failure. She considered intubating the patient herself on the floor but opted to immediately transfer Mrs. Taylor to the care of a pulmonologist and intensivist who was standing by in the ICU, for probable intubation and mechanical ventilation.

Dr. Harris: In my mind, it was a matter of what would be safest. I really don't have a lot of experience with awake intubation, and I knew that a pulmonologist was already involved in the case, so it was a really easy decision from my standpoint to get the patient transferred to the ICU for intubation.

Dr. Harris first saw the patient at 7:57 a.m. and completed her evaluation by 8:20 a.m. It took a few minutes for the logistics to be organized and for Mrs. Taylor to be physically transported. She arrived in the ICU at 8:37 a.m. By this time, her respiratory distress was more pronounced and she had become delirious. Her blood pressure was 142/65 mm Hg, her heart rate was 145

beats/min, her respiratory rate was 38 breaths/min, and oxygen saturation on the nonrebreather mask was 64%.

The pulmonologist preoxygenated Mrs. Taylor with a bag-valve-mask apparatus, administered a dose of midazolam, and attempted intubation at 8:45 a.m. Unfortunately, the attempt was complicated by ventricular fibrillation and a cardiac arrest. The physicians and nurses resumed bag-valve-mask oxygenation, and the oxygenation saturation, which had fallen to the mid-30s, rose to the 80s. Standard cardiopulmonary resuscitation was performed, including 2 to 3 minutes of chest compression, accompanied by boluses of atropine and epinephrine. The patient was defibrillated with 200 J and intubated successfully on the second attempt at 8:49 a.m. Arterial blood gas values after intubation were a pH of 7.09, a PCO₂ of 72, and a Po₂ of 39 on 100% Fio₂.

The patient's oxygenation ultimately improved and her cardiopulmonary status stabilized, but she suffered profound and presumably irreversible brain damage. At the time of discharge, she could not recognize family members or independently perform any activities of daily living. Although the case was informally discussed among the providers involved, it was not forwarded to or reviewed by the hospital's risk management committee. The patient was discharged to a long-term care facility for total custodial care. Several months after discharge, the patient's family sought legal counsel and decided to pursue a malpractice claim. About 20 months later, Dr. Harris received notice that she had been named in Mrs. Taylor's malpractice case.

Dr. Harris: I was sitting in the ICU and my partner calls me up and says, You're getting sued, and that's why I'm leaving medicine.

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- i. As the Plaintiff's Attorney give your Why Perspective Sue Dr. Harris? 20 marks
- ii. As a Defence attorney do you think the law suit is fair? 20 marks
2. Write short notes on any four of the following 40 marks
- a) Code of Medical Ethics b) The Charak Oath c) The Hippocratic Oath d)Declarations of Geneva, e)International Code of Medical Ethics f) Declaration of Helsinkl
3. A 44-year-old patient complaining of menstrual bleeding for 9 days, underwent an ultrasound test and was advised laparoscopy test under general anesthesia for making an affirmative diagnosis. The patient, while under general anesthesia, was subjected to a laparoscopic examination and simultaneously with the consent of the mother waiting outside the operation theatre, abdominal hysterectomy (removal of uterus) and bilateral salpingo-oophorectomy (removal of ovaries and fallopian tubes) were conducted. Does this situation related to 'Informed Consent' negligence? Explain 10 marks
4. How can DISHA help to protect data security and privacy? 10 marks