

Postoperative cardiac arrest after uneventful laparoscopic cholecystectomy in ASA-1 patient

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It's almost 22 years now, I was new to private practice and worked in a small nursing home. A young lady was scheduled for laparoscopic cholecystectomy under GA. She was the wife of a close friend of the owner of the nursing home, so was dealt like a VIP by the OR team. The small nursing home had a simple OT with facilities as good as my medical college. Boyle's machine with Goldman vaporizer, a Cardioscope, pulse oximeter and manual BP apparatus. I had been working there for about one year or so and had purchased Draeger Microvent ventilator. I was used to work single-handedly. We managed almost all every kind of surgery. A very helpful physician, my closest friend, managed almost everything in our 4 bed ICU. The nursing home had established reputation of being the preferred healthcare facility for many reasons, for which it became an NABH accredited hospital within few years.

Our patient was a typical Punjabi lady with some dyspepsia and repeated episodes of right upper quadrant pain requiring a couple of visits to ER. An ultrasound abdomen revealed a large stone in her gallbladder and she clinically had cholecystitis, she was advised an elective surgery. She was seen by me for pre-anesthetic evaluation well in advance and there was nothing remarkable, that I had to be worried about. She used to have occasional nausea, vomiting and headache off and on like most of us do have. She had her normal delivery about 2 years ago in the same place where I was working. Her clinical examination was normal and CBC, LFTs, coagulation profile, viral markers, ECG and chest X-ray were all normal. She was also seen by the physician and was cleared for anesthesia and surgery as ASA-1. On the day of surgery she arrived at 6 am in private room. A large bore IV cannula was placed on left hand and infusion started. Informed consent for general anesthesia and surgery was taken. She was premedicated with inj. ranitidine, metoclopramide, ondansetron and cephalosporin as antibiotic in full dose after a test dose and moved to OT. Thereafter, it was just a replay of all the steps in anesthesia and surgery. ECG, pulse oximeter, manual NIBP monitor applied – preoxygenation with 100% oxygen – mask – Bain's circuit – glycopyrrolate 0.2 mg – pentazocine 30 mg – diazepam 10 mg – pentothal sleeping dose – suxamethonium 100 mg and diltiazem 10 mg for pressor response attenuation. Quick short duration laryngoscopy and intubation with Portex COETT 7.5 in a single attempt. Correct placement confirmed by passing tube in larynx under vision and subsequent 5 quadrant auscultation of the chest and abdomen. A 16G stomach tube passed under vision for gastric decompression. She was manually ventilated with O₂, N₂O and halothane as per hemodynamics. She needed a single dose of pancuronium 4 mg after recovery from scolene. Intraoperative hemodynamics remained smooth. I still remember the surgeon complementing for keeping the HR around 70 during the entire procedure. She received a total of 1L fluids intraoperatively. All port sites were infiltrated with bupivacaine prior to surgery. At

the end of the surgery she was administered diclofenac 75 mg IM and reversed. She was given ondansetron 8mg for PONV. Her extubation covered with lidocaine, went smooth and she woke up pain free with no complaints. At 9am she was moved out of OR. At 1230pm she was walking in her room and self voided. She did have some nausea, for which we repeated ondansetron 8mg. Vital signs record; PR=50, and NIBP normal. At 5pm I found her sitting pain free in bed, talking to attendants and complained of some headache and nausea, which somehow irritated me as I could not attribute it to anything obvious. I reassured her and advised her to be on liquids and left for home. At 8.30pm I received a call from the hospital to rush back as she had arrested. The surgeon and the physician happened to be in their OPD's and they were the first responders. On my arrival she had already received CPR, was intubated and on ventilator with normal vital signs. A quick discussion revealed that she was managed within the warm ischemia time of brain, the tube was correctly placed and ventilator settings were book perfect. The possibility of any drug error or allergic reaction was ruled out and we were wondering what went wrong where? Here GCS was E1M1V(t), pupils were both dilated and not reacting to light. Her temperature, blood sugar, BP, urine output were normal. Ultrasound exam of abdomen ruled out any concealed hemorrhage. There was no swelling on calf areas, ECG was sinus rhythm. Thyroid profile was in normal range. We kept waiting till 4am in the morning trying to figure out what went wrong and how to face the attendants. She just refused to wake up. We decided to go for a short nap and assemble again at 7am. The op list for the next day was cancelled. At 7am we found a huge gathering of attendants there; there were non-stop questions, but her condition remained the same. Against strong resistance by the relatives, I pushed her for a CT scan of head. And to our surprise, we found a huge bifrontal meningioma with cerebral edema. We felt the heavy weight on our heads vanishing and giving us the much needed explanation which the relatives had been demanding. She was evaluated by a neurosurgeon and he opined that she was brain dead and nothing could be done as she had already coned. The husband hugged me, cried and said 'Doc! its not your fault'. We lost her despite all of our efforts. Till date I still wonder if I was at fault or not? Why did we ignore the occasional headaches, the PONV? Why did I use halothane or dextrose. It was the day when I decided to stick to using short acting agents in private practice, not using dextrose unless absolutely indicated and to take halothane off the shelf. This old case still echoes in me, haunts me and remind me of my boss, who used to say, "it takes a morbidity or mortality to teach a medical student". Anesthesia is all about preventing complications and mortality. It's not just putting someone to sleep. To be a good anesthetist you need to be a Sherlock Homes, always trying to pick up visible and hidden clues and staying away from rough seas