PATIENT'S PERSPECTIVE

Drug errors: a case of syringe swap

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SUMMARY

The journal presents this special issue dedicated to drug errors, with just two aspects highlighted; syringe swap and inadvertent wrong drug administration due to look-alike drug containers. This article gives the background of this decision and a victim's vivid narrative of her terrific experience related to drug error during anesthesia.

Key words: Drug errors; Syringe swap; Mortality; Morbidity

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A. Editorial Note:

It was April 2013, we received a case report entitled, 'Similar looking drugs: A serious concern', by Dr Ghanshyam Yadav, et al from Department of Anesthesiology, Sir Sunder Lal Hospital, Institute of Medical Sciences, BHU, Varanasi, (India). They reported a case of a 25 year old female patient, who was scheduled for emergency lower segment cesarean section (LSCS). The patient was given spinal anesthesia; intra-operatively, full dose of thiopentone sodium was injected inadvertently instead of ceftazidime. The patient went into apnea and had to be administered general anesthesia to the patient. Patient had to be extubated and ventilated till recovery. They reported another case report of a 45 year old, COPD patient in Intensive Care Unit (ICU), who was infused atropine instead of metronidazole, recognized and was successfully managed. The picture of the two drugs had striking similarity. The case report is being published in this issue.1

Earlier, a report was received from an authentic source, in which a patient expired due to injection of a muscle relaxant – pavulon, instead of inj. Oradexon® (dexamethasone), in a surgical ward, due to similar drug ampoules. The matter is of immense importance as one of the common drug related errors, and sporadic case report of resultant mortality and/or morbidity have been repeatedly reported.²⁻⁷ A search on PubMed for drug errors' displayed 24113 results, drug error 23189, nursing drug errors 2716 and anesthesia drug errors displayed 750 results. The editor-in-chief decided to emphasize this aspect in a dedicated issue of 'Anesthesia, Pain & Intensive Care'.

The idea was routed to some eminent scholars associated with the journal, which resulted in a special editorial by Prof. Joseph D. Tobias et al,⁸ a special article by Arshad Taqi and Samina Ismail,⁹ this 'Patient's Perspective' (first time introduced in the journal, but likely to be continued), a special 'Clinipics[®] 10 and matching cover picture. During discussions, this incidence was narrated by a lady doctor (name not disclosed).

B. Patient information:

Age: 34 years **Gender:** Female

Profession: Lady Doctor Ethnicity: Asian/Pakistani Marital Status: married

Obstetric History: G2 P2 A0. 1st pregnancy: Normal course throughout. Term delivery. Went into spontaneous labor. Labor arrested at 9 cm. Emergency cesarean section under epidural anesthesia. Outcome: Delivery of a normal healthy baby

2nd pregnancy: Normal course throughout. Elective cesarean section at 38 weeks gestation. Anesthesia planned: combined spinal-epidural.

Pre-op Assessment: patient conscious, well oriented in time, place and person. Anxious, but otherwise fully cooperative.

Afebrile; BP: 118/85 mmHg; Pulse:76/min, regular; SaO₂: 96% on RA; Weight: 72 kg; Resp: normal breath sounds with no added wheeze; CVS: normal heart sounds; CNS: grossly normal; GIT: normal bowel sounds

Obs/Gyn: Cephalic presentation; fetus normal for dates;

fetal heart sounds audible.

Past Medical History: Asthma since childhood controlled on Ventolin® (salbutamol, Organon Laboratories) inhalers prn; hypothyroidism since 3 years, well-controlled on thyroxine 75 μg pre pregnancy.

Dose increased to 100 µg during pregnancy; no h/o diabetes, hypertension, heart disease; no known drug allergies

Past Surgical History: Appendectomy in 2001 under GA

Emergency cesarean section in 2008 under epidural anesthesia.

Investigations: Hb: 9.6 g/dl 2 days before surgery.

TSH: 2.1 three weeks before surgery.

C. Incident Report: Narrated by the Patient:

During the epidural catheter insertion I had vasovagal syncope as a result of which I was only given epidural anesthesia instead of combined spinal epidural as planned. It took about 20 min to act and then the surgery commenced. The initial 20 minutes went smoothly until the baby came out. I was shown the baby and around that time I started becoming aware of

I was taken to operation theatre and talked through the procedure. The anesthetist had planned combined spinal epidural for the cesarean section. The operating room was hot as the A/C had not been turned on; they keep the room warm for the baby. I felt suffocated and felt that I was going to pass out.

the pain in my lower abdomen.

The anesthetist decided to sedate me a little to get through the rest of the procedure.

As soon as she pushed down the injection, my eyes shut down and I felt suffocated. I tried to talk and tell them that I cannot breathe properly but I couldn't speak. My tongue felt heavy. I then tried lifting my arms but couldn't move a muscle. All this happened in a matter of seconds. I could hear them talking but I don't remember the exact conversation. I was finding it harder and harder to breathe and I felt quite helpless. My mind was awake and functional. I remembered the term locked in syndrome from my medicine text books and I was thinking this is how people must feel when they get the stroke.

My grandfather is suffering from chronic inflammatory demyelinating polyneuropathy (CIDP) and is unable to stand or move and I was thinking just how miserable must he be feeling every day. Even the possibility of death was racing through my mind. Meanwhile, I felt pressure being exerted on my jaw as if someone was holding it tight (I was told later that the team was holding my jaw since they observed that I was not breathing and my tongue had fallen back). It only added to my misery. I wondered if the anesthesia team was aware of my condition and if they were making efforts to revive me. I prayed to Allah Almighty to pull me out of this state of utter helplessness. I don't remember exactly how long it lasted but it felt like eternity (I was told later that the whole episode lasted 20 to 25 minutes). Somewhere towards the end before I woke up, I drifted into a state of hallucination in which I was seeing images from different Sci-fi movies.

Next thing I remember is that I could slowly open my eyes. As soon as I was able to speak, the first question I asked was what happened to me. Also a point to note is that soon as I was able to open my eyes and speak, my breathing automatically eased off. I was being given oxygen through a nasal cannula but my nose was blocked and I told them that it was doing me no good. Also I did not feel suffocated anymore and the oxygen was of no help. I was told that I had had bronchospasm and the team was aware of the incident; it surprised me as I thought why they had not intervened earlier then. I remember the whole episode vividly. I was wheeled into the recovery room and given a bolus of nebulizers. My breathing was perfectly fine and I did not need any further oxygen or a nebuliser. I felt slightly drowsy but otherwise was awake. I told everyone gathered around me what I went through. In the next few hours I had completely recovered and the rest of my hospital stay was uneventful.

D. Anesthesia Note:

She was given 1 ml midazolam following the delivery of the baby with the aim to sedate her. She found it difficult to breathe and became incoherent following the injection. Anesthesia team managed her with supplemental oxygen through facemask and general measures at stabilisation. Drug error was not suspected as the condition was not extreme and did not become life threatening. She recovered within 20 minutes and was moved to the PACU. She was interviewed in the PACU half an hour later; her account of the event made the team suspicious of drug error. All the drugs used during the procedure had been discarded by then; it is strongly suspected that she received 1 ml of inj. atracurium (10 mg) instead of 1.0 mg midazolam, as both drugs had been drawn and kept ready on the anesthesia trolley.

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My Most Memorable Patient®

Rabies: A killer disease-II

It happened in June this year: 45 year old Hameed was returning home from work at dusk. He had just got off the bus and turned into a dusty lane towards his house when he sensed a gnaw in the calf of his right leg. As he turned round to look, he was face to face with a menacing dog that leapt at him. Hameed punched the dog hard, which fell down, got up and with bare teeth, dug its claws into his victim's face. Hameed bled copiously from a cut lip, dabbed it with the end of his shirt and headed home. The dog disappeared into a side lane. At home his wife applied powdered red chillies into the leg and lip wounds, as a home remedy, and took him to a city hospital at an hour's drive away, where the face and leg were washed. He was given an injection of rabies vaccine, tetanus and a prescription for an antibiotic. Next morning he had a swollen lip which improved over the next few days. Soon after, he ignored to get the remaining injections and continued on his daily work.

Six weeks to the day the man started running a fever, headache and had sweating. His throat hurt on swallowing. A local doctor recorded his blood pressure as "extremely high", and sent him to a hospital. He was given pills to swallow, at which point he said he could not. He avoided the sight of water. His old aunt, watching him, cackled "you know, in my days we were told that a person who was bitten by a mad dog avoided drinking water." And that is when Hameed realized the gravity of her ominous words.

That afternoon I was called to the ER at Indus Hospital to see this man with 'suspected rabies'. The man had unmistakable hydrophobia and aerophobia and he was sweating profusely from every pore of his body into his soaked clothes. He told me himself in between spasms of his throat about his misadventure with the vicious dog. The bite wounds were no more visible. Hameed was doomed to die, as indeed he did four hours later in an isolation room in our hospital.

Had his bite wounds been washed with soap and water immediately to remove the dog saliva, had he received rabies immune globulin (RIG) into the bite wounds and a series of 5 vaccine injections into the arm, Hameed would have been alive today, taking care of his wife and five children.

Dr Naseem Salahuddin

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