

PREVIOUS SURGICAL HISTORY - DO WE SEE ONE SIDE OF A COIN?

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Keywords: Surgical history, anaesthesia

Sir,

Preoperative history is an important part of preoperative examination. ASA advisory committee guidelines¹ as well as standard text books² focus on the importance of preoperative anesthesia history, but do not focus much on prior surgical history including site of previous surgery, procedure done and any surgical complication occurred. Most of us as anesthesiologists see towards one side of the history, that is previous anesthetic exposure, and if previous anesthetic exposure is uneventful, generally we consider it safe to proceed for surgery. But this looks to be one side of coin, other side being the surgical component of it. And most of the times we tend to overlook towards this component and sometimes this component tends to prove more important than previous anesthesia exposure as happened with us during one such case.

28 years old male admitted in our hospital with a diagnosis of right sided non functional kidney secondary to renal calculi. Patients preoperative history was insignificant except one surgical exposure for right sided open nephrolithotomy one year ago which was under general anesthesia and uneventful. Preoperative physical examination and laboratory investigations were normal. Patient was accepted for anesthesia for right nephrectomy as ASA grade 1 case.

Patient was conscious and coherent on the day of surgery; routine premedication was given with injection midazolam 1mg and injection fentanyl 100 microgram. After preoxygenation for 3 minutes, induction was done with injection thiopentone sodium 250 mg and injection succinylcholine 100 mg, intubated with portex cuffed endotracheal tube no. 8.5 mm internal diameter. Surgery started and hemodynamic were stable during first half hour. After that

patient suddenly developed hypotension with a blood pressure of 60 mm Hg systolic on NIBP without any antecedent change in pulse rate. Surgeon informed that inferior vena cava was entangled in adhesions around kidney and while separating adhesions IVC has been opened and there is around 5cm tear in IVC. The surgical field was flooded with blood and suction showed around 2 liters of blood. Immediately another large bore (16 gauge) IV canula was secured and fluids were pushed, including crystalloids and colloids. One blood was already reserved which was immediately given. Patient blood pressure recorded was around 50 mm Hg systolic till next half hour when we got second blood without cross matching. During this period vascular clamps were made available and IVC repaired after that blood pressure increased to 80 mm Hg systolic. During this episode, patient ventilated with 100% oxygen and head low position. After repairing IVC blood pressure was constantly around 90 mm Hg, patient was shifted to intensive care unit with ventilator support. Postoperative hemoglobin was 7 gm % .patient was extubated after 6 hours of ventilatory support uneventfully without any neurological deficits.

In our case, though previous anesthetic exposure was uneventful, previous surgery caused adhesions and inferior vena cava entanglement within adhesions. While assessing preoperative history this factor was overlooked, additional blood was not ordered.

Previous anesthetic history and previous surgical history are two sides of a coin; anesthesiologist though keen to ask about any anesthetic problems in previous surgery is often biased towards looking surgical component of history. Whenever previous surgery is in

vicinity of major vascular structure like in retro peritoneum, there is always a possibility of adhesions and major vascular structures entangling into it. And during relook surgery injury to major vascular organ can occur. Although common in laparoscopic procedures³,⁴, such mishaps also can occur in open surgery if surgeon finds it difficult to separate adhesions.

Moreover availability of blood is not immediate in such circumstances as we are following the guidelines of maximum surgical blood order schedule⁵. The problem is again complicated if the patient has got rare blood group, a pre-existing cardiac disease, respiratory disease or anaemia.

So in conclusion, preoperative history should include previous surgical procedure done and site of previous surgery, any possibility of adhesions should be discussed with the surgeon, and if there is possibility of vascular structure entanglement in adhesions, possibly keeping more blood component reserved will be a step ahead in delivering safe anesthesia.

REFERENCES

1. Practice Advisory for Preanesthesia Evaluation. A Report by the American Society of Anesthesiologists Task Force on Preanesthesia Evaluation *Anesthesiology* 2002; 96:485-96.
2. The practice of Anesthesiology. In, G.Edward Morgan ,Jr. ,Maged S.Mikhail,Michael J. Murray(ed).*Clinical Anesthesiology*,4th edition.New Delhi,Tata McGraw-Hill publishers,2009;7-8.
3. Nezhat C, Childers J, Nezhat F, Nezhat CH, Seidman DS. Major retroperitoneal vascular injury during laparoscopic surgery. *Hum Reprod.* 1997; 12:480-3.
4. Sandadi S, Johannigman JA, Wong VL, Blebea J, Altose MD, Hurd WW. Recognition and management of major vessel injury during laparoscopy. *J Minim Invasive Gynecol.* 2010;17:692-702.
5. British committee for Standards in Haematology Blood Transfusion Task Force (1990) Guidelines for implementation of a maximum surgical blood order schedule .*clinical and laboratory Haematology* 12;321-327.

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