What Happens if The Patient Does Not Tell the Truth to His Anesthesiologist?

Alev Oztas¹, Ezgi Erkiliç²*, Elvin Kesimci³, İbrahim Keser³ and Duran Canatan⁴

¹Department of Anesthesia and Reanimation, Melidipark Hospital, Turkey
²Atatürk Training Hospital, Ankara, Turkey
³Department of Medical Biology and Genetics, Akdeniz University, Turkey
⁴AGTC diagnosis of Genetic Disorders Center, Antalya, Turkey

*Corresponding author: Ezgi Erkiliç, Consultant of Anesthesia, Atatürk Training Hospital, Ankara, Turkey, Tel: 905054000000, E-mail: eerkilic72@yahoo.com

Abstract

This is the case report of a young man, whose clinical condition has not been identified properly in the preoperative evaluation. A 27-yr-old man presented with complaints of nasal obstruction. His clinical examination was almost unremarkable, except for indistinct cyanosis at the lips. He denied any symptoms related to cardiovascular and respiratory systems. A chest radiograph was normal, as were all laboratory investigations. He had received general anesthesia with persistent low pulse oximetry readings. This led us to investigate him further in the postoperative period and to report Kansas haemoglobin as the first, benign haemoglobinopathy from Turkish population.

Keywords

Preoperative evaluation, Cyanosis, Haemoglobinopathy

Introduction

The anesthesiologists perform preoperative evaluation for not only providing comfort and safety to patients; but also, to get accurate clinical profile of the patient for reducing surgery-anesthesia related complications. This preanaesthetic assessment has several objectives, like measuring risk and reporting it to the patient and reviewing diagnosis and treatment of diseases. Besides, he may request further diagnostic tests if needed. Thus, he reports the anesthetic technique and answers the patient’s questions about it. Kluger et al; showed that 11% of intraoperative incidents, that could be avoided; resulted because of poor preoperative evaluation[1]. It’s been suggested that; a careful physical examination and the history of the patient are noteworthy even more than the preoperative tests[2-4]. In elective surgery, the consent must be signed within a minimum time in advance. Otherwise the consent is not legally valid. On the other hand, a preliminary check-list is recommended in hospitals, as surgical quality standard and safety procedure. However; the physical structure of an anesthesia clinic as well as economical issues may sometimes cause limitations in preoperative evaluation and counseling of patients. Besides, less attention shown to the discussion may sometimes cause limitations in preoperative evaluation and physical structure of an anesthesia clinic as well as economical issues as surgical quality standard and safety procedure. However; the other hand, a preliminary check-list is recommended in hospitals, the patient are noteworthy even more than the preoperative tests[2-4].

Case

A 27-yr-old male with snoring admitted to the hospital. He was diagnosed as septal deviation and scheduled for an elective septoplasty operation by the Ear-Nose-Throat (ENT) surgeon. Afterwards he was sent to the anesthesiologist. Nothing was remarkable in his clinical examination, except for undistinguishable cyanosis at the lips. The patient reported no complications and family history. All laboratory examinations (Complete Blood Count (CBC), biochemical tests) and the chest radiograph were normal. So, as planned, the patient was taken to the operating room, in the morning of surgery. The patient was not premedicated. In the operating room, standard monitoring including pulse oximetry (SpO₂), electrocardiography, and Noninvasive Blood Pressure (NIBP) was initiated. On room air, the SpO₂ recorded a value of 70% that could be increased to 85% by deep inspiration when oxygen was administered at 6 liters/min by a face mask. The plethysmograph trace was of good quality, but the values did not improve any more. When asked to the patient, he began to tell about the same condition in three members of his family. He also confessed that he was afraid of telling this truth; since he was afraid of cancellation of his surgery. Thus, he was offered to postpone the operation for further counselling. Nevertheless, he insisted on having the surgery, giving an informed consent about the present condition. The surgeon and the anesthesiologist decided not to cancel the operation. A 16 G peripheral venous catheter was inserted and 1g cefazolin was administered.

Anesthesia induction was achieved by oxygen (FiO₂:100%), propofol 150 mg, fentanyl 200 mcg, and rocuronium bromide 50 mg, and further maintained by sevoflurane 2%, and O₂ 100%. During this period; SpO₂ did not exceed over 85%. At the end of surgery lasting 75 min, the patient was extubated uneventfully. After 15 minutes he recovered completely. His hemodynamic parameters and respiratory functions were stable. He had a SpO₂ value of 75% on room air.
He was evaluated in the afternoon, on the same day, for persistently low SpO2 values. Pulmonary specialist was consulted. A repeat chest radiograph revealed no abnormalities, while arterial blood gas showed low arterial oxygen saturation of 60.8% and a normal PaO2 of 95.7 mmHg. His Complete Blood Count (CBC) was normal. Hemoglobin assessment by electrophoresis, and following DNA analysis detected the patient to have 30% of Kansas Haemoglobin [5]. Pulse oximetry on the patient’s mother, aunt, grandmother and son also revealed SpO2 values <80% on room air. The next day, the patient was discharged with advice for further counselling and subsequent family screening.

Discussion

The preanaesthetic assessment of a surgical patient by an anesthesiologist plays a vital role in interaction between the patient and physician. During this process; patient’s medical condition, overall health status, risk factors against the anaesthesia are discussed and the patient is informed to give consent. By this way, problems identified might be addressed before surgery to reduce anesthetic complications [6]. Also, an effective preoperative interview was shown to influence patient’s anxiety, satisfaction and confidence [7,8]. However, the time invested in the preoperative evaluation is neither equal nor adequate, for all patients, at all preoperative evaluation clinics [9]. Besides, lack of communication might cause the patients to get afraid of cancellation of their surgeries, as seen in our case. Thus, they might not tell the truth about themselves. In most of the developing countries, impossibilities related to time and unequal opportunities for the patients are a serious problem leading to misunderstanding between the patient and the physician.

Thalassemias and hemoglobinopathies are a group of disorders with a reported incidence ranging from 0.6% to 13.0% in Turkey. However, Turkey hosts different racial, cultural, ethnic groups due to its geographical position, thus; some hemoglobin variants may remain unknown [10].

The anesthesiologists may encounter these disorders, as the primary cause of a surgical procedure, with a problem arising from the disease itself or coincidentally during the surgery, as seen in this case. Actually, preoperative preparation is very important as anesthetic technique, since one of the most important rules of the anesthetic act is to avoid the stress before, during and after the surgery [11]. Stress and anxiety; if not avoided, may lead to changes in oxygenation, acid-base balance, tissue perfusion, and thermoregulation related to the oxygen carrying capacity of the variant hemoglobin [12].

As far as we know; this is the first anesthetic experience with a patient with Kansas hemoglobin from Turkey. Fortunately, many of these disorders, have a benign clinical course. Our patient was an asymptomatic one with low SpO2 values. Indeed, he hesitated to inform us about his and his family members’ cyanosis and we failed to consider its cause.

The accurate management of this patient was exactly to consultate the patient with a cardiologist and to see if oxygen increased the low SpO2 levels monitored at the preanesthetic evaluation prior to the operating day. If detected and suspected earlier, he should have an arterial blood gas analysis by co-oximetry, to rule out any methemoglobin or carboxyhemoglobin. Besides, PaO2 should be documented and further investigations with hemoglobin studies should follow to identify the abnormal hemoglobin variant, prior to surgery. Probably, more detailed and careful physical examination with actual history of the patient would be worthy even more than the preoperative tests [2].

In summary, clinically inconsequential problems, like abnormal hemoglobin variants may be encountered by the anesthesiologists. The anesthesiologist must build a trusting relationship with the patient and spare enough time preoperatively to discuss health problems; so that some infrequent problems can be openly discussed and solved prior to surgery. However; what’s more important is that the anesthesiologists have to investigate possible health problems if some suspicious signs are discovered, because the patients cannot be always relied on. This is what makes anesthesiology both a science and an art; bringing a humanistic approach to it.

References