Preoperative Evaluation; Only For Risk Assessment?

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ABSTRACT

Objective: The aim of this study is to determine the proportion of the patients who were diagnosed with another health problem preoperatively for the first time by anaesthesiologist. Material and methods: 5643 patients, who were admitted to anesthesiology clinic of xxx for preoperative examination and diagnosed with a new disease by anaesthesiologist as results of consultations from other departments and/or examinations were evaluated. Results: As a result of cardiology consultation, 18 patients were diagnosed with valvular heard disease due to the changes in the ECG and chest X-rays. One of these patients was diagnosed as severe AR+MR with pleural effusion. Six patients were diagnosed with prior MI and CAD, 4 of these patients were undergone to the CABG surgery in a state of emergency conditions. One patient was diagnosed with left bundle branch block because of being VES + in the ECG, 16 patients were diagnosed with COPD because of the changes in the PA chest x-ray, and 2 patients were diagnosed with hydatid cyst. One patient was diagnosed as lung cancer and taken to thoracotomy surgery primarily. In addition, 4 patients were diagnosed with scoliosis due to spine seen in chest x-ray. According to biochemistry tests, while 2 patients were diagnosed with new DM, 3 patients had the diagnosis of steatosis due to higher AST/ALT values. It was found out with the ELISA tests that 15 patients were HBsAg + and 8 patients were HCV +. Conclusion: Preoperative visit can reveal other unknown health problems besides the patients’ risks for operations. These diagnoses are in favor for both the anesthesiologist’s and surgeon not only medical but a legal aspects.

Keywords: New diagnostic, Pre-anesthetic evaluation, Preoperative evaluation, Risk assessment

1. INTRODUCTION

Pre-anesthetic evaluation is important for the uptake of medical records, patient history, physical examination and identifying appropriate approaches and taking written informed consent (1). Pre-anesthetic evaluation has been reported to provide a total cost saving by 30% and a total duration saving of anesthesia by 9% (2). According to data of the APECs (Anesthetic Preoperative Evaluation Clinics), the duration of pre-anesthetic examination should be approximately 15-20 minutes (3). APECs improve the cost-efficiency of the hospital by decreasing the costs for the routine laboratory tests, the number of patient cancellations and the length of hospital stays. Preoperative anesthetic assessment in wards and an APEC is assessing time (and, as a secondary outcome, costs), information gain time and patient satisfaction with anesthetic care. (4). With the current intense pressure on hospitals to be more efficient, the timing of the pre-anesthesia assessment may influence the cancellation rate on the day of surgery (5). Fischer (6) reported that almost 90% of operating room (OR) cancellations are the day-surgery cancellations and that these cancellations add an average of 97 min to the turnover time.
In this study, patients who were admitted to our clinic for preoperative anesthesia assessment of elective surgery were included. The aim of this study is to determine the rate of unknown diseases of patients found out through consultation and tests according to Turkish Anesthesiology and Intensive Care Society (TARD) guidelines (7).

2. MATERIAL AND METHODS

Without discriminating sex and age, 5643 patients who came to anesthesiology clinic of Sanko University and Gaziantep University medical faculty hospitals for preoperative examination in a year between January 2013-January 2014 and who were diagnosed with a new disease by anesthesiologist as results of consultation from other departments and/or examinations were evaluated. All tests were made according to TARD guidelines. Due to changes in tests, physical examination, patients’ history, consultations were requested from the appropriate departments. The patients diagnosed with a new another disease as a result of the consultations and tests were recorded to the record book of anesthesiology preoperative evaluation clinic room by secretary of clinic as P.S. near the names with a red pen.

3. RESULTS

Eighteen patients were diagnosed of heart disease as a result of cardiologist consultation requested due to changes in the ECG and chest X-rays, physical examination and history 18 patients (M / F: 14/4) were diagnosed of valvulary heart disease. Five patients were diagnosed with mitral regurgitation (MR), 1 patient with tricuspid regurgitation (TR), 1 patient with mitral stenosis (MS), 11 patients were diagnosed with aort regurgitation and mitral regurgitation (AR + MR). One of these patients (24y / E) was diagnosed with severe AR+MR and was taken to coronary intensive care in a state of emergency because of pleural effusion. According to ECG and TTE results six patients (M / F: 5/1) were diagnosed with prior MI and CAD, 4 of these patients were undergone to the CABG surgery with emergency conditions in cardio-vascularity surgery department. One male patient was diagnosed with left bundle branch block because of being VES + in the ECG.

As a result of pulmonologist consultation requested due to the changes in the PA chest x-ray, 16 male patients were diagnosed with COPD and 2 male patients were diagnosed with hydatid cyst as a result of respiratory function tests and computed tomography (CT). One patient (65y / F) was diagnosed as lung cancer as a result of thoracic surgeon consultation and undergone thoracotomy surgery primarily. In addition, 4 patients (M / F: 1/3) were diagnosed with scoliosis due to spine seen in chest x-ray.

According to biochemistry tests, because of high blood glucose levels 2 female patients were diagnosed with newly DM, 3 male patients had the diagnosis of hepatosteatosis due to AST / ALT values higher than normal with gastroenterology consultation. With the ELISA tests; 15 patients (M / F: 7/8) found out to be HBsAg + and 8 patients (M / F: 6/2) are HCV + for the first time.

4. DISCUSSION

Preoperative anesthesiology assessment is important to determine the anesthetic risk and to select the appropriate anesthesia type for patient, to take measures for possible difficulties, to inform and thus relieve the patient, to prepare the extra materials medicin and blood products if necessary. This study pointed out that preoperative visits may reveal unknown other health problems other than planned situations.

We have to assess the patients physically and their tests in detail and get a good history as a physician in the preoperative period. Getting information from some patients is sometimes difficult, because they avoid telling their histories or they do not know what to say. If necessary, patients may need to be individually asked about chronic diseases as “Do you have hypertension?” or “Do you have heart disease?” In some cases, patients do not want to answer these questions or they can not answer because they do not know the disease. In this case, the most appropriate way is to question (questionnaire) their regular medication and see the drugs used. Some patients may have previously undiagnosed illness due to the avoidance of doctors.

In these patients, questioning functional capacity (8) cardiology and / or pulmonologist consultation can requested according to the instructions in the TARD preoperative assessment guidelines (7). Chronic obstructive pulmonary disease (COPD) is characterized by the persistent airflow limitation and the progressive airway inflammation and its prevalence is rapidly increasing worldwide. Inflammation in the airways is triggered by inhalation of hazardous gases and particles; tobacco
smoking is the leading contributing factor for this type of inflammation (9). Chronic smoking can lead to refractory inflammation in the lung which eventually results the destruction of the alveolar space, loss of surface area for gas exchange and loss of elasticity (i.e., emphysema) (10).

Many smokers are already diagnosed by pulmonologist with dyspnea and have therapy. However, since some patients may not be aware of dyspnea, a pulmonologist consultation can be requested in case of intensive and long-term smokers or prolonged passive smokers. COPD is an important part of postoperative pulmonary complications (11). In the literature, incidence of postoperative pulmonary complications was reported to be about 23% (12-14). Choudhuri et al. found in their study that age greater than 70 years, history of smoking and presence of COPD were significantly associated with an increased risk of PPC among the demographic and preoperative characteristics. (11). Toriyabe et al investigated the perioperative management and postoperative pulmonary complications of patients who had preoperative respiratory problems and consultations with anesthesiologists.

These patients numbered 800. 23.7% of these patients had preoperative consultations, 40.9% had preoperative respiratory management and 62.0% had postoperative respiratory management. Forty-eight patients (6.0%) received postoperative artificial respiration. One hundred and twenty-four patients (15.5%) had some respiratory complications postoperatively and 5 patients (0.7%) died mainly because of the complications (15). Therefore it is very important to determine these situations beforehand in order to decrease the risk of pulmonary complications.

5. CONCLUSION

This study showed that preoperative visit can reveal other unknown health problems not only the risks of patients. These diagnosis are in favor for both the anaesthesiologist and surgeon not only medical but a legal case therefore not satisfied with just a history and physical examination, appropriate medical tests should be performed in preoperative evaluation guidelines of anesthesiology societies according to operation and age.

REFERENCES


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