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# Anesthetic Risk in Traumatology Orthopedia-About 404 Patients

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## **Original Research Article**

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**Article History** *Received: 13.11.2018 Accepted: 20.11.2018 Published: 30.11.2018*  care. Our study is prospective analytic, spread over 8 months from September 1, 2016 to May 12, 2017, will aim to ensure that the effects have occurred perioperatively, the nature of these complications, and seek their favorite factors in order to prevent. 404 patients were admitted to different orthopedic trauma rooms. General anesthesia was performed in 13%, perimedual anesthesia in 45%, locoregional anesthesia in 30% and local anesthesia in 12% of patients. Anesthetic management of orthopedic patients may range from routine management to more complex critical management. **Keywords:** traumatology, orthopedic, anesthesia, risk.

Abstract: Despite all the progress that has been made in the fields of anesthesia, morbidity remains, and no practitioner is now immune to an accident. This is a self-

## INTRODUCTION

Despite the important progress that has been made in the field of anesthesia, morbidity is still common, and no practitioner is now immune to an accident. In order to improve the care provided in the operating room and in response to the objectives of assessment of professional practices today mandatory [1], we have established a register or are recorded continuously the various incidents and accidents occurred in the operating room orthopedic trauma or post interventional surveillance room. We propose a critical reading of this register in order to reinforce anesthetic safety.

## MATERIELS AND METHODS

Our study is descriptive analytic prospective, spread over 8 months from September 1, 2016 to May 12, 2017, will aim to assess the incidence of adverse events occurring perioperatively, the nature of these complications, and look for their contributing factors in order to prevent them.

It will eventually lead to a number of recommendations to improve the practice of anesthesia and improve patient safety within our facility. The analysis focused on the data collected on all patients operated in the orthopedic surgical unit (2 rooms in the central block and 1 room in the emergency room). On each page of the register were recorded the identity of the patient, his antecedents ASA score, the type of anesthesia, its duration, the products used and their evolutions.

Certain complications (pain, hypothermia, chills and postoperative nausea) are not highlighted for this first illustration because they largely involve the availability of preventive means recommended by learned societies.

## RESULTS

404 patients were admitted to different orthopedic trauma rooms. 61.14% of patients are male, the average age of our patients is 49.75 years with extremes ranging from 5 years to 104 years, and general anesthesia was performed in 13%, perimedular anesthesia in 45%, loco-regional anesthesia in 30% and local anesthesia in 12% of patients. 12 patients (2.97%) presented an incident and / or an accident perioperatively. Most of the adverse events occurred during surgery (83.33%) and the majority of the complications occurred after a general anesthesia or sedation.

## DISCUSSION

Improving anesthetic safety requires a better





#### Ouahidi Mohamed et al., SAS J. Surg., Nov, 2018; 4(11): 267-268

knowledge of professional practices and their consequences. To do this, the establishment of an observatory is recommended by foreign learned societies [2, 3]. It is in this perspective that the institution decided to create a morbidity and mortality register. The rate of complications varies from one study to another and from one specialty to another. Comparing the rate of complications during anesthesia of orthopedic traumatology patients, it is 2.97% against 1.64% in our institution, probably explained by the high number of sedation, a finding often found in the literature. In all specialties, the complication rate in a French study is 23.7% [4] explained by the definition criteria used for accidents collected.

#### CONCLUSION

Anesthetic management of orthopedic patients may range from normal routine management to more complex critical management depending on the condition in which the patient is presented. Orthopedic patients with multiple traumas such as head trauma, spinal trauma, pulmonary fat embolism, lodge syndrome or thoracic lesions are high-risk patients in which any vital organ pathology must be treated before the patient is under general anesthesia. The interactions of various drugs such as antibiotics and neuromuscular blocking agents used during the perioperative period in orthopedic patients should warrant special attention with respect to their interactions with each other and with other anesthetic drugs used.

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