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#### Original Research Article

# **Assessment of Preoperative Anemia**

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**Abstract:** Anemia is one of the most common pathologies in the world, with major consequences on health, it is a common condition among patients Surgical, and its prevalence varies between 11% and 76%, depending on sex, age and the underlying pathology requiring surgical intervention, as well as the Hb threshold used for its definition. Our study concluded that anemic patients account for 22.99%. The 38 to 47 age group seemed to be the most affected with a prevalence of 35.48%. The sex ratio is 1.17 in favor of men. Among surgical patients, trauma patients were most affected by anemia (46.51%). Mild hypochromic microcytic anemia is the most common type of anemia in surgical patients. Only 26% of patients received antianemia treatment. Curative and above all preventive therapeutic care is essential. Strongly to understand the consequences of this scourge.

**Keywords:** Anemia, Perioperative, Prevalence, Iron.

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#### Introduction

- Anemia is one of the most common public health problems, il is a very common situation in surgery with an increased risk of morbidity and mortality associated with perioperative complications.
- It is important to implement effective programs to prevent and combat anemia.
- The objective of this study was to determine the prevalence of anemia in the surgical setting in our population as well as the epidemiological, clinical, biological and treatment data.

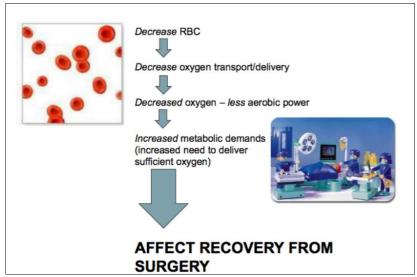


Fig. 1

#### MATERIALS AND METHODS

it's a prospective descriptive and analytical study in Intensive care unit of surgical of the IBN

ROCHD CASABLANCA University Hospital. Between January and June 2022, involving 187 patients. The assessment of anemia was based on the WHO definition.

The parameters studied were: prevalence, distribution by age and sex, types of anemia observed, surgical context and treatment.

The objective of this study was to determine the prevalence of anemia in the surgical setting in our population as well as the epidemiological, clinical, biological and treatment data.

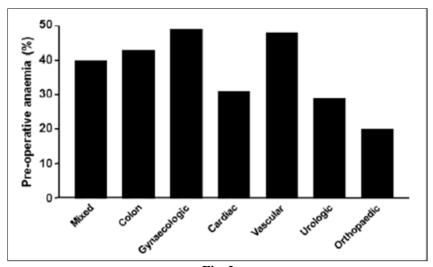


Fig. 2

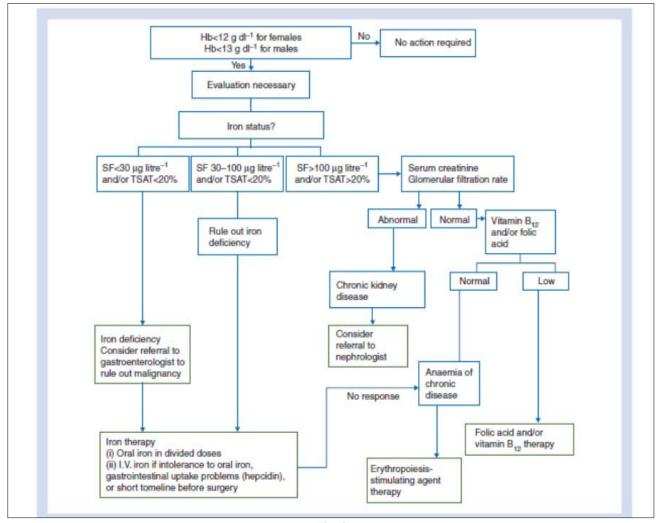


Fig. 3

### **RESULTS**

- The prevalence of anemia was 22%
- Age of the patients was between 18 and 91 years, with a high prevalence in patients aged 38 to 47 years 35%, the male sex being the most affected.
- Visceral surgery were the most affected by anemia 46%
- Trauma patients with 32%, than oncological surgery 10%
- Average hospital stay was 5 days.
- The medical and surgical history of our study is represented by arterial hypertension 15 % and diabetes 5 %.
- Only 9% had a functional symptom
- The main types of anemia were microcytic hypochromic anemia (AMH) 40% and normochromic normocytic anemia (ANN) 30%
- Only 26% of patients received treatment for anemia; 7 treated by blood transfusion and 4 by oral iron.

#### **DISCUSSION**

- The french society of anesthesia ans resuscitation (SFAR) first confirmed, in its 2012 recommendations concerning additional preoperatives examinations, the need to carry out a blood count preoperatively for non minor surgery, with the aim of developing a transfusion strategy.
- The american society of anesthesiologists (ASA) recommended in 2015 to evaluate the patient preoperatively and correct anemia, and recommended a count 3 to 8 weeks before surgery with a risk bleeding, she specified that

it was necessary to look for the causes of anemia (iron deficiency, renal insufficiency or inflammation) and treat it if necessary.

#### **CONCLUSION**

- This investigation confirms the frequency of anemia in surgical patients, which increases the risk of perioperative complications.
- The strategy to correct it should be put in place to reduce blood transfusions, particularly in scheduled surgery.

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