Pre-Anaesthetic Consultation at the National Hospital of Zinder: Epidemiological Aspect and Fate of those Consulted

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Abstract: Introduction: The pre anesthetic consultation is the essential element of the continuity of peri and post interventional care. In fact, it gathers all the information concerning the pre, per operative anesthetic period. For any patient whose condition requires anesthesia, the health structures must provide a preanesthesia consultation.

General objective: To highlight the importance of a preanesthetic consultation through the profile and prognosis of the patients as well as the operative indications recorded.

Patients and method: This was a prospective and descriptive study conducted over a period of six months from January 1 to June 30, 2021 in the anesthesia and intensive care unit of the national hospital of Zinder. Patients consulted by a surgeon, scheduled for surgery and having a preoperative workup were included. Age, sex, history, ASA class, anesthetic technique, operative indication and outcome of the patent were the variables studied. The data analysis was done by Excel. Results: During the study 401 patients were registered with a sex ratio of 3.6%. The mean age was 42 years with extremes from 02 months to 84 years. Medical history represented 08.72% including hypertension (68.57%) and diabetes (11.42%). ASA II class represented 73.81% (n= 296) and ASA I class 26.18% (n= 105). General anesthesia was the chosen technique in 63.34% (n=254) versus 36.5% (n=147) for spinal anesthesia. Hernia and restoration of digestive continuity were the main surgical indications with respectively 17.45% (n=70) and 10.47% (n=42) followed by benign prostatic hypertrophy for 17.45% (n=70) and 10.47% (n=42) followed by benign prostatic hypertrophy for 17.45% (n=70) and 10.47% (n=42) followed by benign prostatic hypertrophy for 17.45% (n=70) and 10.47% (n=42) followed by benign prostatic hypertrophy for 17.45% (n=70) and 10.47% (n=42) followed by benign prostatic hypertrophy for 17.45% (n=70) and 10.47% (n=42) followed by benign prostatic hypertrophy for 17.45% (n=70) and 10.47% (n=42) followed by benign prostatic hypertrophy for 17.45% (n=70) and 10.47% (n=42).

Conclusion: The pre-anaesthetic consultation remains the essential element of the continuity of pre- and post-anaesthetic care. It should be popularized in health structures with high-risk patients.

Keywords: Pre-anaesthetic consultation, profile, prognosis, patient.

INTRODUCTION

The pre-anaesthetic consultation is an essential element of the continuity of care in the peri-anaesthetic and post-interventional period. Its objective is to gather all the information concerning the pre, per and post anesthetic period for any anesthetic procedure delivered to a patient [1-3]. For any patient whose condition requires anesthesia, health care institutions must provide a preanaesthetic consultation when the procedure is scheduled [1, 3, 4]. The first descriptions of the anaesthesia consultation date back nearly fifty years in Anglo-Saxon countries but were limited to high-risk patients or delicate procedures. France was the only western country where the necessity of a pre anesthetic consultation several days before a scheduled procedure is mandatory [1, 3, 4]. The medical and economic benefits of the preanaesthetic consultation at a distance from the surgical procedure are important, and include a reduction in complementary examinations, specialized consultations and surgical deprogramming [3, 4]. At the national hospital in Zinder, patients are operated on both in emergency and scheduled surgery. What about the pre-anaesthetic consultation?

PATIENTS AND METHOD

This is a prospective, descriptive study covering a six-month period from January 1 to June 30,
2021. The study took place in the anesthesia and intensive care unit of the national hospital of Zinder. It is the main referral center for surgery and resuscitation for the Zinder region but also for the regions of Maradi, Diffa, Agadez and northern Nigeria. The patients included in the survey were those consulted by a surgeon, scheduled for surgery, with a preoperative workup, and with a request for a preanesthetic consultation from the surgeon. All included patients had given their written "informed" consent through a well-filled consent form. The variables studied were age, sex, history, ASA class, operative indication, type of surgery, anesthetic technique chosen and patient outcome. The data were collected through a survey questionnaire addressed to the patient and filled in during the preanesthetic consultation, the patient file and the admission register. Data analysis was done using Excel.

RESULTS
During the study period, four hundred and one (401) patients were registered, of which 78.55% (n=315) were men and 21.44% (n= 86) women, i.e. a sex ratio of 3.66. The average age of the patients was 42 years with extremes of 02 months and 84 years. More than half of the patients (65.83%, n=264) had no specific history versus 12.71% (n=51) with surgical and anesthetic history. Medical history represented 08.72% (n=35) including hypertension for 68.77% (n=24) followed by diabetes for 11.42% (n=04), asthma and anemia in respectively 05.71% (n=02). The history of sickle cell disease constituted 02.85% (n=01). The patients were ASA II class in 73.81% (n=296) versus 26.18% (n=105) for ASA I class. General anesthesia was the proposed anesthetic technique in 63.34% (n=254) of patients versus 36.5% (n=147) for spinal anesthesia. Spinal anaesthesia was proposed for surgery of the lower pelvis and the lower limbs. As for general anesthesia or GA, it was the counter indication for spinal anesthesia.

The operative indications recorded during the pre-anaesthetic consultation were as follows:

Hernia was the main reason for pre-anaesthetic consultation with 17.45% (n=70) followed by restoration of digestive continuity following a stoma after peritonitis or occlusion with 10.47% (n=42). Urological surgery, especially benign prostatic hypertrophy, was a reason for consultation in 10.47% (n=42), traumatological surgery in 08.22% (n=33) and lithiasis in 05.48% (n=22). The reason for the pre-anesthetic consultation according to the surgery was summarized in figure 2 below:
It appeared that most of the surgical specialties were concerned by the pre-anesthetic consultation in different proportions. Visceral surgery occupied the first place with 21.19% (n = 85) followed by urology with 15.96% (n = 64) and traumatology with 11.47% (n = 46). Neurosurgery, pediatric surgery, ophthalmology and stomatology were concerned in 05.23% (n = 21), 03.49% (n = 14), 04.23% (n = 17) and 03.24% (n = 13) respectively. The pre, peri and post-operative evolution was favorable for all the patients. Indeed, no case of death was recorded.

**DISCUSSION**

The objective of the health care institutions was patient safety. It is in this spirit that at the national hospital in Zinder a pre-anesthetic consultation was instituted for all patients who were candidates for surgery. In France, the pre-anesthetic consultation has been a concern to the point where its management was the subject of a decree taken in this sense: decree of 5 December 1994 [1-5]. The demand for preanesthetic consultation at the national hospital in Zinder is growing. This increase in demand for preanesthetic consultation or CPA has also been observed in other studies. In France, approximately eleven million anaesthetic procedures are performed each year, of which more than 80% are performed on adults and 06% on children.

Only 401 preanesthetic consultations in six months at the national hospital in Zinder, i.e. a frequency of 67 per month. The preanesthetic consultation made it possible to increase anesthetic safety through an approximate assessment of the anesthetic risk by examining the patient's clinical condition before the procedure. The useful indicator for the anesthetic management of the patient was the ASA class [3, 5, 7]. The ASA class was the conclusion of the preanesthetic consultation. In our survey, ASA I patients represented 26.18% versus 73.81% for ASA I.

The explanations provided by the doctor seemed clear and understandable enough to allow me to make my choice and decisions freely.

Done in Zinder on .......... / .......... / 20.....

Patient Signature:

Signature of parents or accompanying persons :
Physician's signature:

**Table-1: ASA classification according to Med Suisse 2001, volume -3 21479**

| Classe ASA | Detail |
|------------|--------|
| ASA I      | Healthy patient. |
| ASA II     | Patient with moderate impairment of a major function. |
| ASA III    | Patient with severe impairment of a major function not resulting in disability. |
| ASA IV     | Patient with severe impairment of a major function presenting a permanent threat. |
| ASA V      | Moribund patient, whose life expectancy without surgery is less than 24 hours. |
| ASA VI     | A brain-dead patient whose organs are being retrieved for transplantation. |
| U          | If the procedure is performed on an emergency basis, it is added to the class considered. |

**Fig-1:** Consent form from the national hospital in Zinder.
Patient consent form

Last name: ..........................................................

First name: ..................................................

Date of birth/age: .............................................

I, the undersigned, authorize the doctor: ..................

To perform the following medical procedures on me in the interest of my health:

- Anesthesia
- Surgery.
- Medical treatment.
- Amputation
- Other to be specified: ..................................

I know that these procedures can be risky and lead to complications.

I know that during the procedure, or just before it, depending on new information, the mode of anesthesia and/or intervention may change.

I declare that I have had the opportunity to ask all the questions I wish to ask and that I am aware that during or after this care unforeseeable decisions may be necessary or urgent, under conditions where obtaining my informed consent would be impossible.

The study showed that many high-risk patients were operated on at the Zinder National Hospital. The preanesthetic consultation was a means to remedy this operative risk.

Indeed, the PCA ensured an evaluation of the risk related to the terrain and the surgery, an adaptation of the patient's pre and per operative treatment to the intervention and a reasoned choice of the anesthetic technique. The CPA contributed to the economy of a hospital structure by reducing the length of hospitalization. It constituted a framework for exchange between the anesthetist and the patient. It should be popularized in our health structures with limited means where high-risk patients were taken in charge.
**Conflicts of Interest:** The authors declare no conflict of interest.

**Author Contribution:** All authors had contributed to the development of this study.

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