



ANESTHETIC PRACTICE DURING SURGICAL EMERGENCIES AT SIKASSO HOSPITAL

Broulaye KAMISSOKO¹, Ramata SAMAKE¹, Issiaka BAMBA¹, Minkoro TRAORE¹, Amadou DEH¹, Kokoroba SIDIBE¹, Mahamadou SANGARE¹, Drissa BAMBA¹, Moussa KANTE¹.

Anesthesia-Resuscitation Service Hospital-Sikasso

Corresponding author : Broulaye KAMISSOKO, Master in Anesthesia-Resuscitation from Sikasso Hospital, Mali.

Email: makeizie80@gmail.com

Tel : 00223 74103069/66653447

ABSTRACT :

Introduction

The aim of this study was to evaluate the anesthetic practice during surgical emergencies at the hospital of Sikasso.

Methodology

This was a retrospective, descriptive study of anesthetic practice during surgical emergencies which took place in the operating room of Sikasso hospital from January 1 to December 31, 2022. Our study covered all adult patients aged 15 or over operated on in the operating theater of Sikasso hospital, whatever the pathology.

Included were all adult patients aged 15 or over operated on in the operating room for an emergency during the period. Was not included all patients who are less than 15 years old and patients operated for a gynecological emergency

The data was collected on the survey sheets and analyzed using the ACCESS software. The entry was made using Windows XP software.

Results :

Over a period of 12 months, we collected 282 patients operated on in the operating theaters of Sikasso hospital. The male sex was predominant with a rate of 65.2%, i.e. a sex ratio of 1.8% in favor of the male sex and the age group 20-29 years was predominant (21.1%). Occlusion was the predominant surgical history. Peritonitis was the operative indication in 32.27% of cases. The preoperative assessment was not carried out in 70.9% of cases. ASA was not evaluated in 50% of cases. Atropine alone dominated the premedication products with a rate of 56.74%. Ketamine was the most used hypnotic with a rate of 54.25% of anesthetized patients and vecuronium, the most used curare with a rate of 55.32%. AG+IOT dominated the technique with a frequency of 226, i.e. a rate of 80.1%. The predominance of the duration of anesthesia was 2 hours, a rate of 35.1%. The period of practice of anesthesia was 16H-20H with a frequency of 75 or a rate of 26.6%. Arterial hypotension was the predominance of adverse events observed with a frequency of 8 cases or a rate of 2.8%.

Conclusion:

Our study focused on 282 patients anesthetized during surgical emergencies in the general surgery department at Sikasso Hospital from January 1 to December 31, 2010 and allowed us to take stock of anesthetic practice during surgical emergencies. in the anesthesia-resuscitation department.

Keywords: Anesthetic practice, surgical emergencies, incidents, accidents

1. INTRODUCTION

Anesthesia is the more or less complete disappearance of superficial or deep sensitivity. It is said to be general, when it concerns the whole organism, with loss of consciousness (narcosis) and when it affects a limited territory of the body, without loss of consciousness, it is a locoregional anesthesia [1]

In the United States, anesthetic complications represent the sixth leading cause of peripartum maternal mortality and 80% occur in emergency situations [2].

Some countries admit that they do not have enough anesthesiologists and accept that anesthesia be delegated to non-physicians, who have received extensive training [3].

Studies in Africa are disparate on this topic: medication and emergency anesthesia techniques, however a few studies have been carried out: in Cameroon by Tiogo [4]; in Chad by Asina [5] in Mali by Christian Serge Tientcheu [6] did not cover all aspects of the question.

The objective of this study was to evaluate anesthetic practice during surgical emergencies.

Materials and method

1. Framework of the study

Our study was initiated by the Anesthesia Department of Sikasso Hospital and took place in the operating theaters of the said structure.

2. Type of study

This was a retrospective, descriptive study of anesthetic practice during surgical emergencies.

3. Study period

Our study was spread over twelve (12) months from January 1 to December 31, 2022.

4. Study population

Our study focused on all adult patients aged 15 or over operated on in the operating room of Sikasso Hospital, whatever the pathology and meeting the following criteria:

Inclusion criteria: Included were all adult patients aged 15 or over operated on in the operating room for an emergency during the period.

No-inclusion criteria: All patients under the age of 15 and patients operated on for a gynecological emergency were not included.

5. Method:

6. Variables measured

On admission to the operating room, the identity of the patients was recorded on the anesthesia form. We list on our data collection sheet:

Quantitative variables

Age, weight, ASA, Mallampati

Qualitative variables

Sex, patient assessment, anesthetic protocol, surgical indication, type of anesthesia, anesthesia technique, nature of the intervention, adverse event

7. Data analysis and processing

The data was collected on the survey sheets and analyzed using the EPI INFO 7 software. Data entry was made using Windows XP software.

2.RESULTS

Table I: Sex and age group

Variables		Number	Percentage
Sex	M	184	65,2%
	F	98	34,8%
TOTAL		282	100%
Age range (year)	<20	12	4,3
	20-29	68	21,1
	30-39	54	19,3
	40-49	42	14,9
	50-59	44	20,4
	60-69	35	12,4
	>69	27	8,9
	TOTAL		282

Table II: Occupation

Profession	Number	Percentage
Cultivator	102	36,2
Housewives	74	26,2
Civil servant	40	14,2
Student	27	9,6
Shopkeeper	18	6,4
Teacher	8	2,9
Mechanic	7	2,5
Driver	6	2,1
TOTAL	282	100

Table III: Provenance services

Origin	Number	Percentage
general surgery	144	51,1
pediatric surgery	138	48,9
TOTAL	282	100

Table IV: Medical history

Medical history	Number (n=24)	Percentage
Cardiovascular	11	3,9
Endocrinology	5	1,8
Renal	2	0,7
Pulmonary	4	1,4
Sickle cell	2	0,7
TOTAL	24	8,5

Table V: Surgical history

Surgical history	Number (n=34)	Percentage
Obstruction	11	3,9
Strangulated hernia	8	3,7
Peritonitis	6	1,8
Appendicitis	3	1
Adenoma	2	0,7
C-section	2	0,7
Anal fistula	1	0,4

Sigmoid tumor	1	0,4
TOTAL	34	12,1

Table VI: Indication for surgery

Indication for surgery	Number	Percentage
Peritonitis	91	32,3
Bowel obstruction	79	28
Appendicitis	47	16,7
Flattening of abscess	28	9,9
Strangulated hernia	13	4,6
Hemostasis surgery	11	3,9
Leg amputation	10	3,6
Burn	2	0,7
Femoral thrombosis	1	0,4
TOTAL	282	100

Table VII: Preoperative assessments carried out

Preoperative assessments carried	Number	Percentage
Without balance	200	70,9
Groupage +Rhesus	76	27
Groupage+Rhesus+thb	6	2,2
TOTAL	282	100

Table VIII: ASA classification of emergency patients

Class ASA U	Number	Percentage
Not rated	142	50,35
ASA I U	98	34,75
ASA II U	42	14,89
TOTAL	282	100

Table IX: Breakdown of premedication products

Drugs	Number (n=239)	Percentage
Atropine	160	56,74
Diazépam	47	16,67
Atropine+Diazepam	32	11,35
TOTAL	239	84,76

Table X: Products used in general anesthesia

Products	Number (n=239)	Percentage
Ketamine	153	54,25
Propofol	25	8,87
Thiopental	62	22
Vécuronium	156	55,32

Suxaméthonium	84	29,78
Fluothane	153	54,25
Nitrous oxide + Fluothane	87	30,85
Morphine	188	66,66
Fentanyl	52	18,44

Table XI: Products used in locoregional anesthesia

Products	Number (n=43)	Percentage
Bupivacaine	34	12
Bupivacaine+Fentanyl	9	3,19
TOTAL	43	15,19

Table XII: Technique of anesthesia performed

Anesthesia technique	Number	Percentage
AG+IOT	226	80,1
Spinal anesthesia	43	15,2
AG+ Laryngeal mask	13	4,6
TOTAL	282	100

Table XIII: Duration of anesthesia in hours

Duration of anesthesia	Number	Percentage
0 :30 :00	1	0,4
1 :00 :00	42	14,9
1 :30 :00	20	7,1
2 :00 :00	99	35,1
2 :30 :00	8	2,8

3 :00 :00	74	26,2
3 :30 :00	3	1,1
4 :00 :00	31	11
4 :30 :00	1	0,4
5 :00 :00	3	1,1
TOTAL 659 :09 :00	282	100

Table XIV: Time of anesthesia

Time of anesthesia	Number	Percentage
08H-12H	36	12,8
12H-16H	52	18,4
16H-20H	75	26,6
20H-00H	62	22
00H-04H	35	12,4
04H-08H	22	7,8
TOTAL	282	100

Table XV: Adverse events

Adverse events	Number	Percentage
Hypotension	8	2,8
Hypertension	6	2,1
Cardiac arrest	2	0,7
Hemorrhage	1	0,4
TOTAL	16	6,03

3. DISCUSSIONS

Our study showed a male predominance with 65.2% against 34.8% of women, i.e. a sex ratio of 1.8 in favor of the male sex; OUATTARA [14] found the same remark but superior to that of our study with a male predominance of 76.71% against 23.29% of women, i.e. a sex ratio of 3.29 in favor of the male sex. The average age was between 20 and 29 years old, i.e. a rate of 21.1% with extremes ranging from 15 to 92 years old. A different observation from that of OUATTARA [14] with an average age was between 15 and 92 years old, i.e. a rate of 41.10% with extremes ranging from zero 0 to 90 years old. 8.5% of patients operated on in emergencies had at least one medical history; an observation higher than that observed in OUATTARA and lower than that observed in Moussa and FOTSO K, respectively 44% and 17.22%. The cardiovascular history was dominant with a rate of 3.9%. 34.75% of our patients had ASA I U against 50% in ASA I U observed in OUATTARA. This high prevalence of ASA I U is probably related to the emergency context. 17 patients in our series had presented an adverse event during surgery. A number higher than that of OUATTARA who had noted 13 cases. However, hypotension was the dominant adverse effect with a rate of 2.8%. Our series also observed 6 cases of hypotension 1 case of haemorrhage; 2 cases of cardiorespiratory arrest. During our study, we recorded cases of death due to cardiovascular arrest. This observation is different in OUATTARA who received no death caused by anesthesia.

4. CONCLUSION

Our study focused on 282 patients anesthetized during surgical emergencies in the general surgery department of Sikasso Hospital from January 1 to December 12, 2022. It made it possible to take stock of anesthetic practice during surgical emergencies in the department. anesthesia resuscitation. So she pointed out:

A mainly young anesthetized population.

The most represented age group was between 20 and 29 years old; the male sex was much represented with 65.2%.

General anesthesia was widely practiced followed by spinal anesthesia. Most of the population had no history, arterial hypotension was the dominant history with 2.8%.

The majority of patients were in good general condition with ASA I U, a rate of 38%.

Orotracheal intubation associated with spontaneous ventilation was the most used mode of ventilation.

The average duration of the interventions was between 2 and 3 hours.

The most common adverse event was hypotension; 1 case of death was observed.

Spontaneous awakening took place on the operating table; he was judge on the opening of the eyes the reflex of swallowing and spontaneous movements which attests to a good quality of awakening.

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