



Evaluate the quality of the management of obstetric-surgical emergencies at the SIKASSO Hospital

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ABSTRACT

Introduction

The aim of this study was to assess the quality of the management of obstetric-surgical emergencies at SIKASSO Hospital. Methodology This is a prospective descriptive cross-sectional comparative study. Our study extended over 2 months, from October 1 to November 30, 2016. This is a study carried out in the operating room of the obstetrics and gynecology department of the anesthesia, resuscitation and emergency department of the SIKASSO Hospital. Our study focused on all the anesthesia records of patients meeting the following criteria: Included were all women admitted to a surgical obstetric emergency chart. Not included were all women without non-emergency obstetrical-surgical pathology and those whose records were not found.

The information obtained from the medical files is mentioned on an individual data collection sheet on which the variables to be studied appear. Statistical analysis was performed using SPSS software (version 10.0) and Microsoft Office 2007.

Results

Our study allowed us to identify 117 patients out of 135 during the study period, i.e. a frequency of 86.66% of our activities.

Conclusion

Anesthesia-resuscitation plays an important role in the management of obstetric and surgical emergencies. Also, the adequate management of obstetrical and surgical emergencies requires the establishment of a good anesthetic technical platform in order to minimize perioperative complications.

INTRODUCTION

The increase in the rate of obstetrical pathologies in general and obstetrical-surgical pathologies in particular has caused enormous problems for their management over the past ten years. Nowadays several women die around half a million in the world. In Africa more than "30%" of deaths and "70%" in Latin America [1]. In the world, according to the WHO, every minute a woman dies from pregnancy complications. In Africa, obstetrical emergencies are responsible for 30% to 98% of overall maternal mortality, with haemorrhage as the leader. It has been shown that 69% of these deaths are preventable thanks to Anesthesia and resuscitation measures [1]. In Mali, the maternal mortality rate is still very high; it is estimated at 464 per 100,000 births according to the results of the EDS 4[3] survey. The purpose of our study was to make an inventory of the quality of anesthetic management of obstetric emergencies.

Keywords: Quality, obstetrical and surgical urgency, care

MATERIALS AND METHOD

1 - Study framework:

Our study was initiated by the Anesthesia Department of the Sikasso Hospital and took place respectively on the operating sites of the programs and surgical and gynecological-obstetric emergencies.

2- Type of study: This was a prospective descriptive cross-sectional comparative study.

3 Study period: Our study extended over 2 months, from October 1 to November 30, 2016.

4 - Study population: Our study focused on all the anesthesia records of patients meeting the following criteria:

5 - Inclusion criteria: All women admitted to a surgical obstetric emergency chart.

6 - Non-inclusion criteria: All women without an obstetrical-surgical pathology not in emergency and those whose files have not been found.

7- The variables studied:

Sociodemographic variables; age, level of education, profession, marital status, origin; the reason for admission; consultation or anesthesia visit the history, indications for surgery, ASA class, Mallampati score, anesthetic protocols, biological assessment; the intraoperative period, intraoperative adverse events and patient transfer.

8- ethical considerations:

The data was collected with the authorization of the managers of the various departments while respecting the standards of the establishment. The data processing was anonymous, i.e. no names appeared in the data analysis. The results of our study will be made available to the hospital administration for useful purposes.

9- Data collection and analysis:

The information obtained from the medical files is mentioned on an individual data collection sheet on which the variables to be studied appear. Statistical analysis was performed using SPSS software (version 10.0) and Microsoft Office 2007.

RESULTS

Our study allowed us to identify 117 patients out of 135 during the study period, i.e. a frequency of 86.66% of our activities. The highest age group was that of 31 to 41 years old with a 62.39%. The weight of parturients from 50 to 60 kg was the most represented with 74.36%. 73.50% of parturients resided in Sikasso. Referred or evacuated parturients represented 66.67%. 49.57% of parturients had a medical history; 41.03% had an obstetric history and 9.40% had a surgical history. 93.16% of the parturients had a mallampati I score. 91.45 of the parturients were classified as ASA I. The B G R represents 40.17 followed by the H R P with 19.66 obstetric etiologies. ALR was the most used anesthetic technique with 43.59% because these so-called parturients were hemodynamically stable with normal blood pressure. It is for this reason that the frequency of ALR was higher than that of AG. Ketamine was the most used hypnotic with a 44.44%. Halothane was the most halogenated with 56.41%. The most used opioid was fentanyl with a rate of 52.14%. Celocurine was the most used curare with 54.70%. 0.9% isotonic saline was the most commonly used filling solution at 74.36%, followed by Ringer's lactate with 19.66%. We note 18.80% of parturients were transfused. Tachycardia was the most represented at 47.01 followed by arterial hypotension with 35.91%. The support dabs the delay of less than 30 min was the most represented is 73.50%.

DISCUSSION

Surgical obstetric emergencies represented approximately 86.68% of our anesthetic activities during the study period, i.e. 117 patients operated for surgical emergencies 135 patients. This frequency is higher than that of AG who conducted the same studies in 2015 with 31; A Y [1] who found 1.55% and KANE.F [5] who was 2.3%. The most represented age group was that of [31-41] years, i.e. a rate of 62.39% over 2 months with extremes ranging from 20 to 41 years. M G in his research had an age group of 31 to 41 years with a rate of 40.40% during one year, A Y in his series found an age group between [20-35] years with a rate of 82.6% and KANE. F found the most represented age group was [21-35] years with 64.17% of cases. The majority of parturients in our study had a weight load of between [50-60] kg or 74.36%. In our series, 11 cases of scarred uterus were identified as surgical history, i.e. a rate of 9.40%. This rate is lower than those at M G who found 34.46 and AY [1] who had 17.39%.

CONCLUSION

Anesthesia-resuscitation plays an important role in the management of obstetric and surgical emergencies. General anesthesia must comply with measures to prevent difficult intubation and inhalation of gastric fluid, which is a formidable complication in the case of surgical emergencies in general. The awakening must be monitored in the post-intervention monitoring room < SSPI > by qualified personnel. Locoregional anesthesia provides the greatest anesthetic safety, taking into account contraindications and technical constraints. Also, the adequate management of obstetrical and surgical emergencies requires the establishment of a good anesthetic technical platform in order to minimize perioperative complications.

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ANNEX

Table I: Distribution of parturients according to age group.

Age	Number	Percentage
20 Years	14	11.97
20 30 Years	22	18.80
31 41 Years	73	62.39
+ 41 Years	8	6.84
Total	117	100

Table II: Distribution of parturients according to weight

Weight in kg	Number	Percentage
50kg	11	9.40
50 60 kg	87	74.36
+ 60 kg	19	16.24
Total	117	100

Table III: Distribution of parturients according to residence

Residence	Number	Percentages
SIKASSO	86	73.50
Outside Sikasso	31	26.50
Not Precise	0	0.00
Total	117	100

Table IV: Distribution of patients according to mode of admission.

Mode of admission	Number	Percentage
Reference / Evacuation	78	66.67
Coming by itself	39	33.33
Not Precise	0	0.00
Total	117	100

Table V: Distribution of patients according to history.

Background	Number	Percentages
Medical	58	49.57
Midwifery	48	41.03
Surgical	11	9.40
Total	117	100

Table VI: Distribution of patients according to the Mallampati Score.

Mallampati Score	Number	Percentage
Mallampati I	109	93.16
Mallampati II	7	6.00
Mallampati III	1	0.84
Total	117	100

Table VII: Distribution of parturients according to the ASA Classification

ASA Classification	Number	Percentage
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ASA I + U	107	91.45
ASA II + U	9	7.7
ASA III + U	1	0.85
Total	117	100

Table VIII: Distribution of parturients according to obstetric etiologies.

Etiologies	Number	Percentage
H R P retroplacental hematoma	23	19.66
R U uterine rupture	9	7.69
P P placenta previa	10	8.55
Pre-eclampsia and eclampsia	13	11.11
B G R pelvis generally narrowed	47	40.17
G E U ectopic pregnancy	6	5.13
Other cervical tear	9	7.69
retained placenta uterine atony		
Total	117	100

Table IX: Distribution of parturients according to the anesthetic technique.

Anesthetic Techniques	Number	Percentage
A L R	51	43.59
AG+I O T	37	31.62
AG VS	29	24.79
Total	117	100

Table X: Distribution of parturients according to intravenous used in anesthetic induction.

hypnotics	Number	Percentage
Ketamine	52	44.44
Thiopental	5	4.27
Propofol	9	7.69

Other	51	43.59
TOTAL	117	100

Table XI: Distribution of parturients according to the halogens used for anesthetic maintenance.

Halogenated	Number	Percentage
Halothane	66	56.41
Isoflurane	00	0.00
None	51	43.59
Total	117	100

Table XII: Distribution of parturients according to the use of opioids intraoperatively.

Morphines	Number	Percentage
Morphine	5	4.27
Fentanyl	61	52.14
None	51	43.59
Total	117	100

Table XIII: Distribution of parturients according to the use of muscle relaxants.

Curares	Number	Percentage
Celocurine	64	54.70
Vecuronium	2	1.71
None	51	43.59
Total	117	100

Table XIV: Distribution of parturients according to the use of filling solutions.

Filling solutions	Number	Percentage
Isotonic saline serum 0,9	87	74.36
Ringer lactate	23	19.66
Macromolecules	7	5.98
Total	117	100

Table XV: Distribution of parturients according to intraoperative transfusion.

Transfusion	Number	Percentage
Yes	22	18.80
No	95	81.20
Total	117	100

Table XVI: Distribution of parturients according to the occurrence of adverse events during the operation.

Adverse events	Number	Percentage
Tachycardia (FC 100Pouls min)	55	47.01
Hypotension (TA 100 60mmhg)	42	35.91
Bradycardia (FC 60pouls min	1	0.85
Hypertension (TA140 90mmhg	3	2.56
Hemorrhagic shock	5	4.27
Coagulopathy	2	1.71
Failure of spinal anesthesia	0	0.00
Without intraoperative IE	9	7.69
Total	117	100

Table XVII: Distribution of parturients according to the time of treatment.

Response time	Number	Percentage
30 min	86	73.50
30-60 min	14	11.97
+60 min	17	14.53
Total	117	100