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Original Research Article

Epidemiological and Clinical Profile of Ectopic Pregnancy at the "Major Moussa Diakité" Reference Health Center in Kati

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Abstract: ***Introduction*:** Ectopic pregnancy is a common cause of morbidity and sometimes mortality in women of childbearing age [1]. ***Method*:** This was a descriptive cross-sectional study with retrospective data collection over a five-year period from January 1, 2019 to December 31, 2023. All cases of ectopic pregnancy received and taken were included in the study. In charge at the "Major Moussa DIAKITE" Reference Health Center in Kati during the study period. ***Results*:** out of a total of 26,133 live births, we managed 67 cases of ectopic pregnancy, i.e. a frequency of 2.5%. Married women (92.5%) and those with a history of sexually transmitted infections (35.8%) were the most affected. The average time from onset of symptoms to admission was 120 hours. The average gestational age at diagnosis was 14 weeks of amenorrhea (8 -20 weeks). The diagnosis was clinical in 62.2% of cases and in 37.8% on ultrasound coupled with hormonal dosage (B HCG). On admission the general condition of the patients was good in 60% of cases; with an average hemoglobin level estimated at 8.5 g/dl and the average hemoperitoneum volume was 925 milliliters. The ectopic pregnancy was ruptured in 98%, it involved the tubal ampulla in 88.1% of cases and the ovary in 2.9%. The contralateral appendix was clinically healthy in 91% of cases. The treatment was surgical from the outset in 98% of cases and one (01) case was medical (i.e. 2%) without success. Seven (07) patients or 10% were transfused. No maternal death was observed postoperatively. ***Conclusion*:** ectopic pregnancy was frequent in our structure; the diagnosis was essentially clinical and the treatment was surgical by laparotomy.

Keywords: Ectopic Pregnancy, Epidemiological And Clinical Profile; Kati Reference Health Center.

INTRODUCTION

Ectopic pregnancy is a common cause of morbidity and sometimes mortality in women of childbearing age [1]. Its etiology is not clearly specified, its clinical picture is polymorphous and its therapeutic methods are very diverse [2]. The incidence of ectopic pregnancies has doubled or tripled over the past two decades in industrialized countries. Depending on the country, the estimated incidence is 12 to 14 per 1000 pregnancies [3]. In a territorial-based study, the incidence is estimated in France at 20 per 1000 pregnancies [4]. The frequency of ectopic pregnancy as a complication of sexually transmitted diseases (STDs) and tobacco associated with the significant risk of after-effects makes it a public health marker and justifies early diagnosis [5]. For it to be carried out, at the slightest sign of warning, the ectopic pregnancy must be mentioned, which can make it possible to modify the therapeutic strategy [6]. However, new diagnostic and therapeutic treatments lead us to ask new questions [7]. Should we practice radical or conservative treatment? If conservative treatment is chosen, should we carry out laparoscopic treatment or medical treatment? When an ectopic pregnancy occurs, are there arguments to quickly recommend in vitro fertilization?

Tubal location represents 95% of ectopic pregnancies [4]. Other locations include abdominal pregnancies where implantation takes place on the mesentery or on the small intestine, ovarian locations (around 2% of GEUs) and much rarer locations such as cervical involvement or in other organs of the abdomen

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(liver, spleen). There are also twin ectopic pregnancies, bilateral ectopic pregnancies and heterotopic pregnancies combining an intrauterine pregnancy and an ectopic pregnancy. The frequency of heterotopic pregnancies is estimated at one in 15‰ spontaneous pregnancies but can reach 1% with medically assisted procreation techniques (ART) [5]. Due to the absence of data on ectopic pregnancies in our structure, we initiated this study whose objectives were to determine the epidemiological and clinical profile of ectopic pregnancy in our structure.

PATIENTS AND METHODS

This was a descriptive cross-sectional study with retrospective data collection over a period of five years, from January 1, 2019 to December 31, 2023 in the Obstetrics and Gynecology department of the Kati Reference Health Center.

We included all women seen for ectopic pregnancy whose treatment was on site. We excluded all women operated on for other indications or evacuated to other structures.

The material and supports used consisted of patient files, anonymous data collection sheets and operative report registers. The diagnosis was clinical and/or paraclinical (UCG and ultrasound test). Treatment was immediately surgical in the event of rupture with hemoperitoneum or hemosalpinx, medical treatment was reserved only for pauci or asymptomatic ectopic pregnancies, without hemoperitoneum. During the operation, we considered as pathological appendix, a tubal occlusion, intra-tubal nodules on palpation, a tuba errecta appearance, a sub adhesive location of the tube or a history of annexectomy.

Data entry and analysis was carried out by the SPPSS statistical software 27 of 2020. The statistical test used was Person's Chi2 and the Fisher test with significance if P less than: 0.05.

RESULTS

Frequency

Over a period of five (5) years, we recorded 67 cases of ectopic pregnancies out of 26,133 live births, a frequency of 2.56%.

Clinical Profile of Patients

Table 1: Sociodemographic and clinical characteristics of patients

characteristics of patients		Number (N=67)	Percentage (%)
Marital status	Bride	62	92,5
	Bachelor	2	3
	Divorcee	1	1,5
	free Union	1	1,5
	Widow	1	1,5
Age	15-19	6	9
	20-24	23	34,3
	25-29	15	22,4
	30-34	15	22,4
	35 and over	8	11,9
Occupation	Household	40	59,7
	Employee	6	9
	Pupil/Student	3	4,5
	Saleswoman/trader	16	23,9
	Seamstress	1	1,5
Residence	Kati	43	64,2
	Excluding Kati	24	35,8
Educational level	Out of school	33	49,3
	Primary	23	34,3
	Secondary	5	7,5
	Superior	3	4,5
	Koranic school	3	4,5
Background	Sexually transmitted infections (STIs)	24	35,8
	Infertility > 1 year	36	53,7
	Ectopic pregnancy	6	9
Signs/Symptoms	Pelvic pain	42	62,7
	Vaginal bleeding	13	19,4
	Amenorrhea	4	6
	Cycle disorder	8	11,9

The average age of the patients was 27.5 years with the extremes of 15 and 40 years.

- The average time between the onset of symptoms and admission was 120 hours with the extremes of 72 and 168 hours.
- The interval between the last pregnancy and the current ectopic pregnancy ranged from 7 to 60 months, with an average of 33.5 months.
- The notion of infertility was found in 53.7% of patients.
- The average gestational age at the time of diagnosis was 14 weeks of amenorrhea with the extremes of 8 and 20 weeks.
- The diagnosis was clinical (pelvic pain, late periods, metrorrhagia) in the majority of cases with 62.2% and paraclinical (UCG and ultrasound test) 37.7%.

Table 2: Distribution of patients according to type of surgical intervention

Intervention	Number (N=67)	Percentage (%)
Salpingectomy	59	88,1
Salpingectomy and Myomectomy	1	1,5
Salpingectomy and Cystectomy	4	6
Salpingectomy and tubal plasty	2	3
Medical treatment	1	1,5

- The general condition of the patients was good in 60% of cases with an average hemoglobin level of 8.5 g/dl on admission.
- The ectopic pregnancy was ruptured in 98% of cases, the tubal ampulla was the most affected area with 88.1% of cases.
- The contralateral appendix was clinically normal in 61.8% of cases.
- The treatment was surgical from the outset in 98.5%.
- The average volume of hemoperitoneum was 925 ml with volumes ranging from 350-1500 milliliters.
- Patients were transfused only in 10.4% (7 cases)
- However, no maternal deaths were recorded during this period.

DISCUSSION

The frequency of ectopic pregnancy varies from one study to another and from one region to another in the same country depending on the health system organizations. In our study, this frequency was 2.56. This result was higher than in certain studies carried out in Bamako; Diaby B [8], in 2023: 1.2% at the Kalaban Coro reference health center in Bamako, Keita M [9], in 2006: 1.4% at the Reference health center in Commune IV of the District of Bamako. It was lower than some African studies such as Kenfack B *et al*., [10], in 2012 in Cameroon which reported 3.45%. It is well established that ectopic pregnancy is more common in women with a history of infertility [11]. The 20–24-year-old age group was the most represented in our study, this rate is close to that of BAH B [12], which had the maximum between 20-30 years old; on the other hand, Keita M [9], finds a range of 19-33 years old.

This is explained by the fact that these age groups correspond to the period of intense genital activity of the woman during which the gynecology and obstetrics history accumulates [13]. About 50% of adolescent girls in our study region have already had sexual intercourse. The average time between the last pregnancy and the current ectopic pregnancy was 33.5 months.

According to some literature, ectopic pregnancy occurs mainly in women who have a history of infertility [14]. In our series, 53.7% of patients had a history of infertility.

The diagnosis was clinical in 62.2% of cases, consisting of the triad of pain + metrorrhagia + late periods. We note a predominance of clinical diagnosis in the management of ectopic pregnancy in studies carried out in developing countries [10], where patients consult not only at an advanced age of pregnancy, but also very late. after the onset of symptoms.

The hemoglobin level carried out urgently showed that 73.1% of patients had a level between 7-10 g/dl or 8.5 g/dl on average. This rate was comparable to that reported by Magassouba D [15], who found 62.9%. The volume of hemoperitoneum was 350-1500 milliliters, justifying the preponderance of the clinical method of diagnosis which was mostly done by simple paracentesis or culdocentesis. Pelvic adhesions were found in 34.8% of cases. It is well established that these adhesions often result from chronic pelvic infections and are a source of ectopic pregnancy and infertility [16].

Indeed, 34.8% of cases in our series had a history of sexually transmitted infections. The contralateral appendix was clinically normal in 78.8% of cases. We did not find data concerning the macroscopic state of the contralateral appendix in the literature, yet this parameter seems important to us in the prognosis of future fertility.

The late consultations of patients, associated with high blood loss, justify the predominance of

surgical treatment, carried out in 97% of cases, as in other studies [8, 9].

No cases of operative complications or mortality were observed. If treatment was immediate once the diagnosis was established, ectopic pregnancy is rarely fatal [17].

In our series, all cases are treated urgently without prior financial or material requirements despite the precarious financial situation currently prevailing in our country.

CONCLUSION

Ectopic pregnancy was relatively frequent in our health structure, better organization of health services and control of clinical signs allowed us to obtain a good maternal prognosis. However, the treatment was essentially surgical by laparotomy.

Conflict of Interest: None

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