

Epidemiological and Clinical Aspects of Extra Uterine Pregnancy in Yangambi

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SUMMARY: Ectopic pregnancy is considered a public health problem in all countries of the world regardless of the level of development because of its impact on the subsequent fertility of patients. It is one of the main hemorrhagic emergencies encountered in the gynecological environment, constitutes a serious pathology in the first trimester of pregnancy and is the leading cause of maternal mortality in the first trimester of pregnancy.

Methodology: This is a documentary, retrospective, descriptive and cross-sectional study, covering 23 cases of ectopic pregnancy treated between January 1, 2017 and December 31, 2021 at the Yangambi Reference Health Center and Hospital. General of Yangambi.

Conclusion: Ectopic pregnancy is a serious pathology which presents a vital and functional emergency and mainly affects young women. In addition, it constitutes a public health problem. In our series, the frequency is 0.98% and 38.3% of our patients were pauciparous, the majority being paucigestic with 55.32%. The history of STIs (34.8%) is the main risk factor found and the mortality rate was 4.3%.

KEYWORDS: Ectopic pregnancy, Yangambi, DR Congo

PROBLEMATIC

Ectopic or ectopic pregnancy is defined as the implantation and development of the egg outside the uterine cavity (1). This pathology is one of the main hemorrhagic emergencies encountered in the gynecological environment (2). It constitutes a serious pathology in the first trimester of pregnancy and is the leading cause of maternal mortality in the first trimester, one of the main complications of early pregnancy (3). It is considered a public health problem in all countries of the world regardless of the level of development because of its impact on fertility. subsequent treatment of patients. The vast majority of ectopic pregnancies are pregnancies that implant in the fallopian tube or tubal pregnancies, but can be abdominal or ovarian (4). It presents the leading cause of mortality in the first trimester of pregnancy. Its occurrence seriously compromises the obstetric future of the woman, in fact 1/3 of ectopic implantations occur in nulliparous women, 50% of whom will remain sterile (5). Its incidence varies between 1 to 2% of pregnancies (6) and in developed countries is of the order of 100 to 175 per year per 100,000 women aged 15 to 44 years (5). Several recent studies have revealed the constant increase in the frequency of GEU, an increase linked to the expansion of sexually transmitted infections (STIs) and tobacco which are associated with the significant risk of after-effects and are a public health marker justifying an early diagnosis (7). The frequency of ectopic pregnancy (EUG) is steadily increasing throughout the world and is noted by several authors, linked to the expansion of sexually transmitted diseases (8). It is the leading cause of maternal mortality in the first trimester of pregnancy, representing nearly 10% of maternal deaths. In the USA, it is responsible for 9% of maternal deaths and affects the subsequent fertility of patients (9). In France, it represents 2% of pregnancies or 14,000 ectopic pregnancies per year (10). This pathology remains potentially lethal: in the United States its incidence increased fourfold between 1970 and 1989, where it is responsible for 9% of maternal deaths and affects the fertility of patients (10). In Africa, its frequency varies from one country to another: 2% in 1997 to 3.15% in 2000 in Gabon and 2.3% in 2002(11). 2.3% in 2010 in Cameroon (3), in Guinea, this frequency increased from 0.54% in 1973 to 1.08% in 1986 then to 5.28% in 1990 (2), but returned to 1.4% in 2009(12). In the Democratic Republic of Congo, in a study carried out at the University Clinics of Kinshasa from July 1, 2002 to June 30, 2009, NSINGI reported

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a frequency of 1.8% (13); while another study carried out in Lubumbashi between January 2007 and June 2009 the author reported a prevalence of 8.2% (14). This increase is due to the increase in risk factors such as sexually transmitted infections, tubal pathologies, tubal surgeries, IUD contraception, mini-dose progestins, voluntary termination of pregnancy and tobacco (15). Its diagnosis is often late due to misleading forms, often in developing countries despite advances in new techniques. Finally, this pathology has the particularity of requiring an increasingly broad therapeutic arsenal ranging from abstention to radical surgical treatment through medical treatment (10). However, not all countries have these means, particularly those in the developing world, despite the fact that its management has evolved especially in developed countries (16). This is why we were interested in studying the epidemiological, clinical and therapeutic aspects of ectopic pregnancy in Yangambi.

GOALS

Our study pursues the following objectives:

- 1) Determine the frequency and main complications of ectopic pregnancy in Yangambi;
- 2) Determine the maternal morbidity and mortality linked to ectopic pregnancy and the profile of women developing GEU in Yangambi

METHODOLOGY

1. Study environment

This will be a cross-sectional study with analytical purposes with retrospective collection of data on patients hospitalized and treated for GEU in the maternity department of the YANGAMBI General Reference Hospital and YANGAMBI REFERENCE HEALTH CENTER during a period of 5 years, that is to say during the period from January 1, 2017 to December 31, 2021. The study exhaustively identified all cases of ectopic pregnancy in the department during the study period. A survey sheet was established for data collection. Data entry and analysis were carried out using SPSS software, version 20, Microsoft Office Excel 2007. The results are expressed as number, average and percentage (%).

2. Study population and sampling

a). Study population

Our study population consists of all pregnant women who were consulted in the health structures included in our study during the aforementioned period.

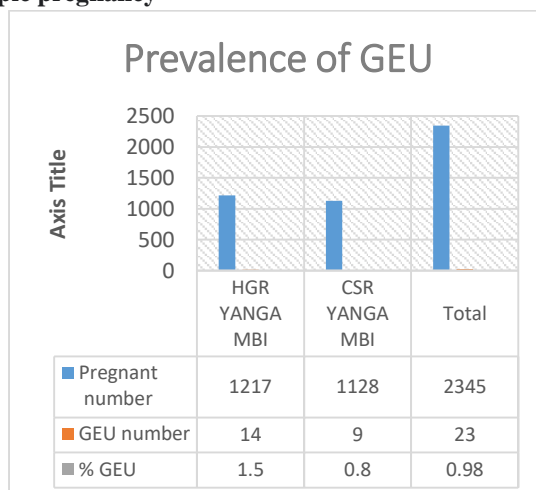
b). Sample

We exhaustively identified all cases of GEU admitted during the period of our study. Our sample consists of 23 cases of ectopic pregnancy out of 2345 pregnant women who consulted the health structures selected during the period of our study.

RESULT

1. Prevalence of ectopic pregnancy

Graph N°I: Prevalence of ectopic pregnancy

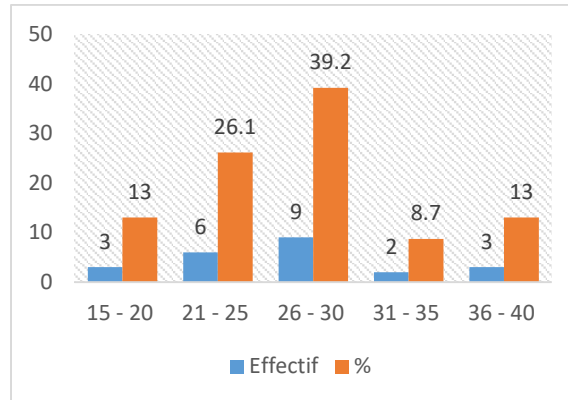


It appears from this graph that out of a total of 2345 pregnant women admitted to the gynecology-obstetrics departments of the various hospital structures during our study period, 23 developed ectopic pregnancy, i.e. a hospital prevalence of 0.98%.

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2. Age

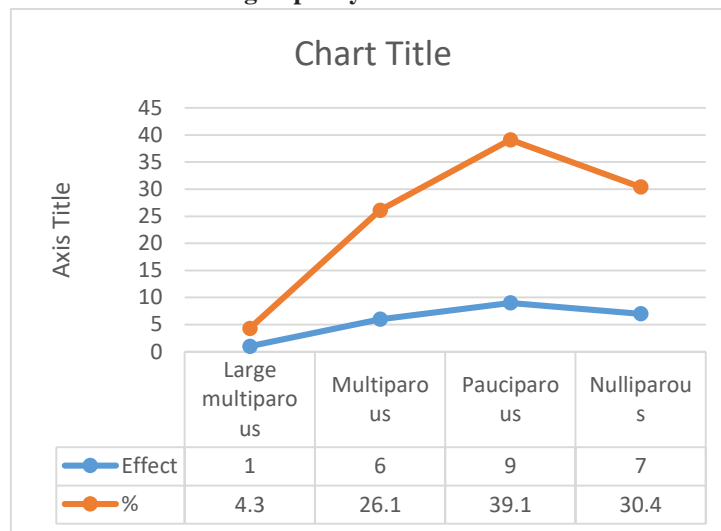
Graph N°II: Distribution of cases according to their age



The graph shows us that the age group most affected by ectopic pregnancy is that of 26-30 years old (39.1%). The age ranges from 15 to 39 years with an average age of 26.6 years.

3. Parity

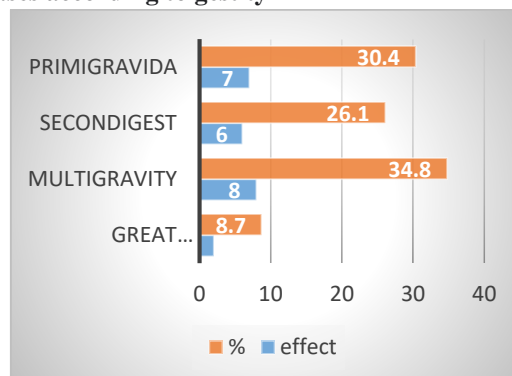
Graph N°III: Distribution of cases according to parity



This graph shows us that the majority of our respondents are pauciparous (38.30%) and large multiparous only represent 6.38%.

4. Gestity

Graph N° IV: Distribution of cases according to gestity

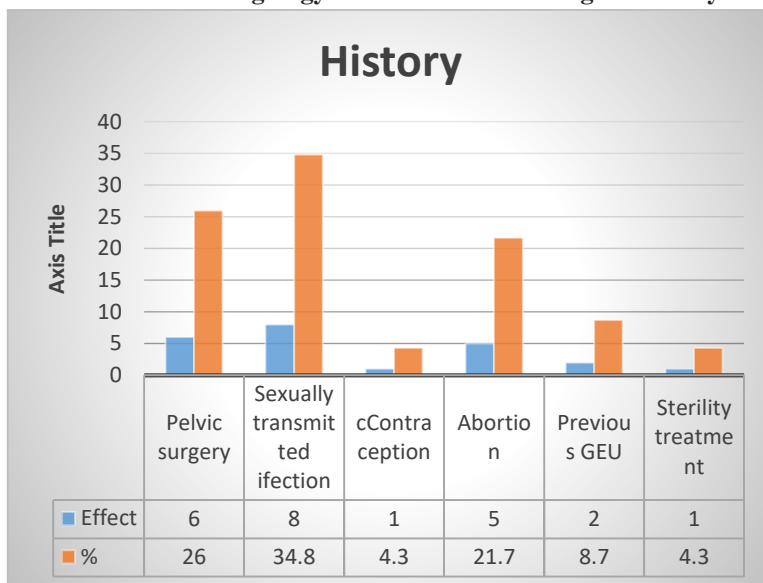


It appears from this graph that 34.8% of our respondents are multigravids, followed by primigravidas and paucigests respectively 30.4% and 26.1%.

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5. Gyneco-obstetric and surgical history

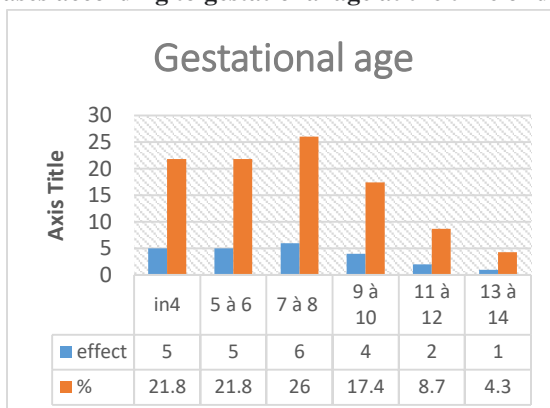
Graph N°V: Distribution of cases according to gyneco-obstetric and surgical history



The graph above shows us that of all the antecedents observed, Sexually Transmitted Infection comes in first position (34.8%) followed by Pelvic Surgery (26%) and abortion (21.7%).

6. Gestational age

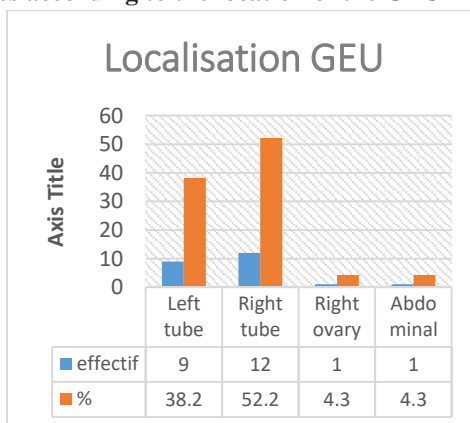
Graph N°VI: Distribution of cases according to gestational age at the time of diagnosis



The graph above shows us that in the majority of cases the gestational age is between 7-8 weeks (26%), with an average age of discovery of an ectopic pregnancy of 6.6 weeks. The age extremes are 3 and 14 weeks.

7. Location of the GEU intraoperatively

Graph N°VII: Distribution of cases according to the location of the GEU intraoperatively

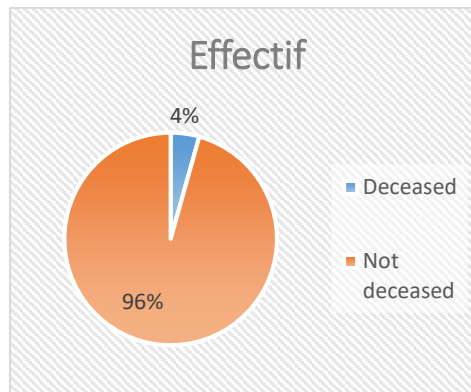


This graph shows that in 52.2% of cases, the GEU is located at the level of the left tube and 38.2% at the level of the right tube. Tubal location represents 90.4% of cases.

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8. GEU mortality rate

Graph N°VIII: Mortality linked to GEU



This graph shows us that of the 23 patients with GEU during the years 2017 and 2021, 1 died; i.e. a lethality of 4.3%.

DISCUSSION

1. FREQUENCY OF ECTOPIC PREGNANCY

In our series, this incidence is of the order of 0.98%, a result close to that of FATIMETOU ABDELKADER with 0.99% (19), of RAFIA with 0.92% (20) and LOFREDO with 0.84% (21). But our results are lower than those of several studies carried out elsewhere: NKUNA with 8.2% (14), MEYE and Coll with 2.23% (11), DOHBIT and Coll with 2.3% (3), DEMBELE with 1.89% (17). This trend towards reduction in frequency in our environment could be explained by the improvement in the management of sexually transmitted infections and genital infections, the result of women's awareness to follow adequate treatment in the event of a sexually transmitted infection and also their prevention.

2. AGE

It appears from Table II that the 26 to 30 year old age group is the most affected by ectopic pregnancy (39.1%) and the average age of patients is 26.6 years. These results are slightly better than those found by DOHBIT and Coll. in Bafoussam in 2008(3) and DIALLO Y and al (2), in Conakry who found respectively 33.3% in the age group of 25 to 29 years with an average age of 29.69 years and 31.2% in the 25 to 30 year old bracket with an average age of 28.9 years. In Bamako in 2009, DEMBELE reported a frequency of 87.5% in the age group of 26 to 35 years with an average age of 26 years (17). We note that a woman can have an ectopic pregnancy at any age during her period of genital activity. It follows that the frequency of ectopic pregnancy decreases with extreme ages and increases during the active period of sexual life. The absence and decrease in sexual activity at these ages could explain this observation. DIALLO Y and Coll. (2), reveals that the increase in ectopic pregnancy with age could be explained by the increase in exposure time to risk factors. This frequency seems to increase with age.

3. PARITY AND GESTITIS

The distribution of cases according to parity shows that pauciparous women were the most affected (38.3%) and to a lesser extent multiparous women (6.38%). This trend is also found by DOHBIT J and Coll. in Bafoussam in 2008 (3) i.e. 41.3% and 36% of pauciparous cases for DIALLO Y and Coll. in Conakry in 2009 (2). As for gestational age, it is especially the paucigestes (primigestes and secondigestes) who are the most affected by ectopic pregnancy, i.e. 56.5%. This figure is close to that reported by DIALLO Y and Coll. (2). In most studies, ectopic pregnancy is classically associated with low gestation and low parity (2, 11). The high frequency of ectopic pregnancy among paucigestes in our study could be explained by the high frequency of their risk factors. According to DIALLO Y and Coll. (2), parity does not influence the frequency of ectopic pregnancy, a point of view also shared by ANORLU and Coll. (18).

4. HISTORY

The analysis of table no. V shows that 34.8% of our patients had at least one history of Sexually Transmitted Infection, 26% had a history of pelvic surgery and abortion comes in 3rd. position with 21.7%. These results are different from those of the study conducted by DOHBIT and Coll. (3), in whom the history of Pelvis inflammatory disease comes in 1st position (24.75%). While in the series by DIALLO Y and Coll. (2), sexually transmitted infections were the most frequent antecedents (88.2%) followed by induced abortion (43.1%). In Kinshasa, NSINGI (2009) (13) found that pelvic infection was the most important risk factor. According to ANORLU and Coll. (2005) (18), illegal abortions and sexually transmitted infections increase the risk of becoming pregnant 14 times and 9 times respectively.

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As for abortion, the risk is higher when it is complicated. Sexually transmitted infections are frequent in our study, which is consistent with certain literature which emphasizes its high frequency as a risk factor for ectopic pregnancy. This could be linked to sociocultural habits and ethnic diversity in an environment like ours where polygamy and divorce are at the origin of the multiplicity of partners which undoubtedly favors STIs.

5. LOCALIZATION OF GEU

In our series the tubal location represented 90.4%, of which more than half (52.2%) were on the left, results consistent with those of the African literature: For DIALLO Y. and Coll (2) the tubal location was (86.3%) with an ampullary predominance of (43.1%), for NAYAMA and Coll (7) these rates were 88.11%.

CONCLUSION

Ectopic pregnancy is a serious pathology which presents a vital and functional emergency and mainly affects young women. In addition, it constitutes a public health problem. In our series, the frequency is 0.98% and 38.3% of our patients were pauciparous, the majority being paucigest with 55.32%. The history of STI (34.8%), is the main one. risk factor found.

REFERENCES

- 1) LABAMA L., *Obstétrique du praticien*, Université de Kisangani, RD Congo, 2005.
- 2) DIALLO Y. et Coll., *Prise en charge de la grossesse extra-utérine à Conakry (Guinée)*, *Médecine tropicale*, 69 : 565-568, 2009.
- 3) DOHBIT J.S., *Grossesse extra-utérine à l'hôpital régional de Bafoussam ; Aspects épidémiologique, clinique et thérapeutique*, *Clinic in Mother Child Health*, vol 7, N° 1, juin 2010.
- 4) Coste J, Bouyer J, Germain E, Ughetto S, Pouly J, Job-spira N. Recent declining trend in ectopic pregnancy in France: evidence of twoclinic Epidemiologic entities fertile steril Hum Reprod 9. 2000; 74.
- 5) Lansac J, Gallet C, Rochet Y. La grossesse extra-utérine et son pronostic obstétrical, France, gynéco-Obsté. 1975;(4) : (65-74).
- 6) Randriambololona D.M.A., Randriambololona N.T. et al. Grossesse extra-utérine à Madagascar. *Médecine et Santé Tropicales*. 2012;22:394-397.
- 7) Nayama M, Gallais A, Ousmane N, et al. *Prise en charge de la grossesse extra-utérine dans les pays en voie de développement : exemple d'une maternité de référence au Niger*. *Gynecol Obstet Fertil*. 2006;34:14-8.
- 8) ABDOULAYE S. et Coll., *A propos de 116 cas de grossesses extra-utérines observées à Bangui (Centrafrique)*, *Cahier d'étude et de Recherches Francophones/Santé*, Vol 13, N°1, 29-30, Janvier 2003.
- 9) MEIRIK O, NYGREN KG., *Ectopic pregnancy and IUDs; incidence, risk rate and predisposing factors*. *Acta Obstet. Gynecol. Scand.*, 1980, 59, 425-427.
- 10) DUPUIS O. et Coll., *Grossesse extra-utérine*, Tsunami, 2001.
- 11) MEYE J.F. et Coll., *Aspects actuels de la Grossesse extra-utérine à Libreville (Gabon) : à propos de 153 cas*, *Cahier d'étude et de recherches francophones/Santé*, vol 12, N°4, 405-8, octobre-décembre 2002.
- 12) DIALLO F.B. et Coll., *Grossesse extra-utérine (GEU) aspects épidémiologique et thérapeutique au service de gynécologie obstétrique de CHU IGNACE DEEN, Conakry*, *Médecine d'Afrique Noire*, 46, 2006.
- 13) NSINGI K, *Aspects épidémiologiques, cliniques et thérapeutiques de la grossesse extra-utérine aux Cliniques Universitaires de Kinshasa*, *Mémoire de spécialisation*, UNIKIN, 2009.
- 14) NKUNA H. *Fréquence de grossesse ectopique à l'hôpital Sendwe à Lubumbashi (RDC)*, sur www.memoireonline.com
- 15) Henri de TOURRIS et Coll., *Gynécologie et obstétrique*, 7^e éd., Masson, 2000.
- 16) RONGIERES-BERTRAND, *Le manuel du généraliste, gynécologie obstétrique*, Tsunami, 2007.
- 17) DEMBELE Y., *Grossesse extra-utérine aspects épidémiologique, clinique, diagnostic, thérapeutique et pronostique au centre de santé de*
- 18) *référence de la commune V du district de Bamako*, thèse, 2006.
- 19) ANORLU R et al, *Risk factors for ectopic pregnancy in Lagos, Nigeria*, *Acta Obstet Gynecol Scand*, 2005, 84: 184-8.
- 20) Fatimetou Abdelkader : *grossesse extra - utérine au centre hospitalier nationale de NOUAKCHOTT : aspects épidémiologiques, cliniques et thérapeutiques*, *International Journal of Advanced Research*, DOI: 10.21474/IJAR01/10208, December 2019
- 21) Rafia Mohamed. *Prise en charge de la grossesse extra-utérine au service de gynéco-obstétrique "B" (A propos de 86 cas)*. Thèse .Med. Casa 2006,137.
- 22) Loffredo.V, Tesquier.L, Paris F.X, Debrux .J. *La grossesse extra-utérine*. *ncycl. Méd. Chir*. 1984; 700- A10, 20p