

ADVANCED NON-TUBAL ECTOPIC PREGNANCY AT THE "HOSPITAL CENTRAL" OF MAPUTO (MOÇAMBIQUE)

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Summary: The Authors report clinical data and pathological findings from a series of 13 cases of nontubal ectopic pregnancies which occurred at the Hospital Central of Maputo (Moçambique), during a 14 months period. The rather high frequency of abdominal pregnancy (6 cases diagnosed during the third trimester of gestation) is set in relation to restriction of human resources and diagnostic facilities within the peripheral prenatal clinics.

INTRODUCTION

The frequency of ectopic pregnancy in the United States showed a nearly three-fold increase from 4.2 per 1000 live births in 1970 to 12.3 per 1000 live births in 1980. Conversely, the frequency of advanced non-tubal ectopic pregnancy, reported by Beacham⁽¹⁾ and by Strafford⁽²⁾, showed a decrease from 2.9 per 1000 deliveries in 1962 to 1.2 per 1000 deliveries in 1977, as result of the improved prenatal care and of the availability of modern diagnostic tools (ultrasounds, radio-immunoassay of pregnancy hormones etc.). Early detection and treatment prevents tubal ectopic pregnancies from possible secondary development as abdominal pregnancies; furthermore it reduces the risk of maternal death which is fivefold greater in non-tubal ectopic than in tubal gestation.

In developing Countries, human resources and medical technology restriction, limiting the access to early diagnosis, may lead to a different epidemiological trend of advanced non-tubal pregnancies. On this assumption, we analysed the clinical records of the period May 1, 1980 - June 30, 1981 from the Maputo Hospital Central. The study was part of a cooperative program in the field of mother and child health care, developed in Maputo by the "Istituto per l'Infanzia di Trieste" and

directed by the "Divisione generale per la cooperazione allo sviluppo" of the Italian Ministry for Foreign Affairs".

CASE REPORT

13 cases of advanced non-tubal pregnancy occurred, among a total of 204 ectopic pregnancies.

13 cases of advanced non-tubal ectopic pregnancy were detected during the period of time defined above, accounting for a frequency of 7.3 per 1000 deliveries and of 2.9% of all the ectopic pregnancies; 6 were abdominal, 4 were cervical, 2 were ovarian and one interstitial (Table 1).

All the 6 cases of abdominal pregnancy were diagnosed during the third trimester. All the patients, but one, had previously delivered vaginally and none of them had a previous history of infertility. The mean maternal age was 26 years.

The fetal lie was transverse in two cases, vertical cephalic in two cases and vertical breech in two cases.

In 5 cases, no signs of fetal viability were detectable when the patients first entered the hospital. In one case the fetus was alive and the diagnosis of abdominal pregnancy was made when moving fetal parts were palpated directly through the abdominal wall. In all the other cases, after the failure of an induction made to deliver what was thought to be an in-utero dead fetus, a more accurate examination led to a corrected diagnosis.

In 5 cases, gross pathologic findings at laparotomy consisted of a placenta adherent to the posterior fold of the broad ligament, to the Douglas pouch and to the sigmoid colon; in one case the trophoblast, completely enveloping the fetus, was adherent to the omentum and to the infundibular pelvic ligament.

Table 1. - *Non-tubal pregnancies at the Maputo Hospital Central (May 1, 1980 - June 30, 1981).*

Case	Classification	Mat. age	Gest. age/Birthweight	Conceptus	Management
1	Abdominal	32	2400 g	Stillborn	Conceptus removed
2	Abdominal	23	2200 g	Stillborn	Conceptus removed
3	Abdominal	29	2600 g	Liveborn	Conceptus removed
4	Abdominal	25	2800 g	Stillborn	Conceptus removed
5	Abdominal	28	28 weeks	Stillborn	Conceptus removed
6	Abdominal	23	32 weeks	Stillborn macerated	Hysterectomy
7	Ovarian	26	8 weeks	≈ 8 w.	Salpingo-oophorectomy
8	Ovarian	31	8 weeks	≈ 8 w.	Salpingo-oophorectomy
9	Cervical	21	12 weeks	≈ 12 w.	Hysterectomy
10 (*)	Cervical	28	12 weeks	≈ 12 w.	Hysterectomy
11	Cervical	27	12 weeks	≈ 12 w.	Hysterectomy
12	Cervical	25	10 weeks	≈ 10 w.	Hysterectomy
13	Interstitial	32	25 weeks	≈ 24 w.	Hysterectomy

In all the cases the placenta was completely removed. A pelvic infection demanded hysterectomy in one case. A 24 hour peritoneal drainage was left in two cases.

The infants average birthweight was 2200 g. The infants sex was female in 5 cases; none of the fetuses had visible malformations. The only liveborn infant (birthweight 2600 g) was discharged in good health after seven days from birth.

The 4 cases of cervical pregnancies were detected between the 10th (one case) and the 12th (three cases) week of gestations, at the first attempt to treat what was thought to be uterine bleeding due to inevitable abortion. The pelvic examination revealed an enlarged thin and bleeding cervix, larger then the rest of the uterus. In all the cases a profuse bleeding demanded emergency hysterectomy which, in one case, was not performed timely enough to save the patient's life. All the specimens, analysed by the pathologist, were classified as cervical pregnancies, according to the Rubin criteria (3).

The 2 cases of ovarian pregnancy were detected during a laparotomy made on indication of enlarging adnexal mass diagnosed during the 8th week of pregnancy. The surgical therapy consisted of salpingo-oophorectomy in both cases; the specimens were classified as true ovarian pregnancies, according to the Spielberg criteria (4), the conceptus being completely surrounded by ovarian tissue.

The only case of interstitial pregnancy became symptomatic during the 24th week of gestation when the occurrence of hemoperitoneum caused a hypovolemic shock. The laparotomy, promptly performed, revealed a 2000 ml hemo-

peritoneum. The bleeding came from the uterine fundus where the muscular layer was extensively replaced by trophoblast; the fetus was found within the abdominal cavity. A hysterectomy was performed. No trophoblastic tissue was found within the uterine cavity.

DISCUSSION

Our series of non-tubal advanced ectopic pregnancies accounts for a frequency of 6.3% of all the ectopic pregnancies, about half of those recently reported by Delke (5), but about the same as reported in a series from Devraigne in 1946 and from Grell in 1952 (6, 7), before technology could improve diagnostic precision.

A separate analysis of a different class of ectopic pregnancies shows that, comparing our series with others from developed Countries during the same years:

- the observed rate of 11.5 ectopic pregnancies per 1000 deliveries is similar to that reported by the Center for Disease Control (8);

- the observed ratio of 1 cervical pregnancy per 4404 deliveries is much lower than that (1/1000) reported by Shinagawa (9);

- the observed ratio of 1 cervical pregnancy per 4404 deliveries is much lower

than that (ranging from 1/2034 to 1/8487) reported by Grimes⁽³⁾;

– the observed ratio of 1 abdominal pregnancy per 2936 deliveries, is much higher than that (1/7931) reported by Strafford⁽²⁾.

Considering that the global frequency of ectopic pregnancy observed in our Department is similar to that reported in developed Countries, we think that the low "non-tubal ectopic" to "total ectopic" ratio observed in our series is due to missed cases among ovarian and cervical pregnancies; it is likely that some of these cases remain undiagnosed, due to lack of human resources and diagnostic facilities within prenatal clinics, and evolve towards spontaneous resorption. The same considerations may apply in explaining the relatively high frequency of abdominal pregnancies; in fact the lack of early diagnosis allows for the natural evolution of non-resorbed tubal pregnancies towards the extremely variable and unpredictable range of clinical manifestations of abdominal pregnancy.

CONCLUSIONS

The present study seems to indicate that the epidemiology of advanced non-

tubal ectopic pregnancy, which differs in our series from that of developed Countries, mostly reflects the constraint of health services and diagnostic facilities, a wealth more than a health problem faced by developing Countries.

Conversely the epidemiology of ectopic pregnancy globally considered, which is similar in our series to that from developed Countries, is known to reflect that of acute salpingitis and its sequelae: again an education and health more than a wealth problem faced by both developed and developing Countries.

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