

## Repeat ipsilateral ectopic gestation: a series of 3 cases

MA Okunlola, OA Adesina, and AO Adegunle

\*Department of Obstetrics and Gynaecology, University College Hospital, P.M.B, 5116, Ibadan, Oyo State, Nigeria

### Summary

Ectopic pregnancy remains an important cause of maternal mortality and morbidity as well as early foetal wastage in Nigeria and in other developing countries. We report 3 different cases of repeat ipsilateral ectopic pregnancy seen in the gynaecological emergency unit of the University College Hospital, Ibadan. Cases of repeat ectopic pregnancy often gives rise to diagnostic dilemma, and this becomes more difficult when it occurs at an ipsilateral location.

**Keywords:** Pregnancy, ectopic, repeat, ipsilateral, diagnosis, dilemma

### Résumé

La grossesse ectopique demeure une importante cause de la souffrance et la mortalité maternelle ainsi que la mort des fœtus au Nigéria et d'autres pays sous développés. Nous rapportons trois cas de grossesse ectopique ipsilatérale répétées vu en urgence dans l'unité gynecologique du Centre Universitaire Hospitalier (UCH), Ibadan. Ces cas de grossesse donnent des dilemmes de diagnostic et plus compliqués lorsqu'elle est localisé ipsilateralement.

### Introduction

Ectopic pregnancy is defined as a gestation in which implantation occurs at a site other than the endometrial lining of the uterine cavity. The fallopian tube is the site in over 95% of cases but other less common sites are the cervix, peritoneal cavity and ovaries [1]. Ectopic pregnancy remains an important cause of maternal mortality in the first trimester of pregnancy with enormous health care costs. The psychological cost is often overlooked, as it is not generally viewed in the same way as other pregnancy losses.

There has been an increase in the incidence of ectopic pregnancy globally in recent times. A recent study on a population of Nigerian women reported an incidence of 3.13% or 1 in 32 deliveries [1]. The availability of assisted conception techniques, contraceptive use particularly progestogen only preparations and improved methods of diagnosis and reporting accounting for the increased incidence in developed countries, while in sub-Saharan Africa pelvic inflammatory diseases, septic abortion and puerperal sepsis are common predisposing factors [2]. A previous ectopic pregnancy is definitely a risk factor for repeat ectopic pregnancy. Other identified risk

factors are previous spontaneous miscarriage, tubal damage and age  $\geq 30$  years [3].

The treatment of ectopic pregnancy can be surgical where open or laparoscopic salpingectomy or salpingostomy is done. Conservative approaches include the local or systemic injection of potassium chloride, methotrexate or hyper-osmolar glucose. Following salpingectomy, a contralateral repeat ectopic gestation may occur, however, ipsilateral repeat is a rarity. We report from our centre in Ibadan in the South West of Nigeria a series of 3 cases of repeat ipsilateral ectopic pregnancies. Risk factors, modes of presentation and management options are discussed.

### Case report

#### Case 1

A 30 year old Para 2 +2 alive presented at our gynaecological emergency clinic with 7 week history of amenorrhoea and 3 day history of lower abdominal pain. There was associated dizziness.

In 1995 and 1997 she had full term normal deliveries that were hospital supervised. In 1999, she had right total salpingectomy at our hospital on account of a ruptured ectopic pregnancy.

On examination, she was pale; her blood pressure was 100/60 millimetres of mercury. Her abdomen was distended. There was a Pfannenstiel incision scar. There were features of peritonism. The pelvic organs could not be defined due to exquisite tenderness. Ultrasound scan examination revealed an extrauterine pregnancy. The packed cell volume was 22%. Exploratory laparotomy revealed haemoperitoneum of 1600mls, a ruptured right interstitial gestation, grossly normal left adnexal structures and filmy adhesions in the pouch of Douglas.

A right cornual wedge resection and repair was done and 2 units of whole blood were transfused intraoperatively. She had uneventful postoperative recovery. Histology report showed section of fallopian tube and myometrial tissue fragments distended with haemorrhagic clot and chorionic villi. The myometrial tissue and fallopian tube wall were infiltrated with lymphocytes, neutrophils and plasma cells. Features were suggestive of background chronic salpingitis with tubal gestation.

#### Case 2

A 39 year old Para 2 +2, 2 alive presented at our outpatient clinic with a 6 week history of amenorrhoea and a day history of colicky lower abdominal pain. Her

gynaecological history revealed a spontaneous abortion in 1989 and left partial salpingectomy in 1991 on account of a ruptured ampullary ectopic gestation. In 1993 and 1995 she had caesarean sections on account of cephalopelvic disproportion. Examination revealed a clinically stable woman. There was a puckered Pfannenstiel incision scar and moderate suprapubic tenderness. The uterus was marginally bulky. There was left adnexal tenderness. Urine pregnancy test was positive. Ultrasound scan revealed fluid in the pouch of Douglas and a complex left adnexal mass. Exploratory laparotomy revealed 700ml of haemoperitoneum, a ruptured ectopic gestation of the left fallopian tube stump and dense adhesions involving the pelvic structures. Excision of left fallopian tube stump with gestational sac was done. Her postoperative period was uneventful.

Histology report revealed a segment of fallopian tube with sac-like weighing 8 grammes measuring 6x5x4cm, soft consistency with cavity contained mucin enveloped by blood clot. Section showed extensive haemorrhage, degenerate chorionic villi and decidual reaction. Overall features are consistent with products of conception.

### Case 3

A 28-year-old Para 1<sup>+1</sup> alive presented at the outpatient clinic with a 1-week history of right iliac fossa pain and 9 week history of amenorrhoea. There was no associated dizziness. She had a right total salpingectomy done 4 years before for a ruptured tubal gestation. She had a full term normal delivery 2 years after this. On examination she was clinically stable. There was tenderness in the right iliac fossa but no guarding or rebound tenderness. Pelvic examination revealed a bulky uterus. Urine pregnancy test was positive. The packed cell volume was 37%. A diagnosis of acute appendicitis, keep in view repeat ectopic pregnancy was entertained. Ultrasound scan revealed a bulky uterus with no gestational sac seen and free fluid in the pouch of Douglas. There were no masses in the pelvis. Exploratory laparotomy revealed 200mls of haemoperitoneum, a right interstitial ectopic gestation, adhesions involving the left adnexal structures. A right cornual wedge resection and repair was done. She had an uneventful postoperative recovery. Histology report showed section of fallopian tube and myometrial tissue fragments distended with haemorrhagic clot and chorionic villi. The myometrial tissue and fallopian tube wall was infiltrated with lymphocytes, neutrophils and plasma cells. Features were suggestive of background chronic salpingitis with tubal gestation.

### Discussion

A subsequent pregnancy rate of 66% has been quoted regardless of surgical or medical modes of management of an ectopic pregnancy. Ten percent of these are re-

current ectopic pregnancies [4]. Ilesanmi and Sobowale working in a Nigerian population reported an incidence of 3.4% repeat ectopic pregnancies in their series of 206 cases [1].

When comparing conservative and radical surgery, the results are conflicting, with pregnancy rates varying from no significant differences [5] to lower rates of both intrauterine and recurrent ectopic pregnancy after salpingectomy [6]. Irrespective of the type of surgical procedure performed, laparoscopic treatment resulted in a lower rate of recurrent ectopic pregnancy (7% versus 17%) compared with laparotomy (Hidlebaugh and Omara, 1997). A history of infertility is however an important factor for recurrence, with an overall conception rate of 77% for all methods of surgical treatment and a rate of recurrent pregnancy of around 10% [4].

In Nigeria, majority of the patients (66%) present late with ruptured ectopic gestation [1]. In women with tubal rupture, abdominal pain with amenorrhoea is the most common presenting complaint. Other possible features are those of shock and peritoneal irritation [1, 2]. Subacute or repeat cases of ectopic pregnancy may give rise to diagnostic confusion. This is even made worse in cases of ipsilateral location of the repeat ectopic pregnancy leading to a delay in the diagnosis by an unsuspecting gynaecologist especially on the right side where acute appendicitis may be erroneously diagnosed. Women with a history of previous ectopic pregnancy should have early access to ultrasound scan to verify a viable intrauterine pregnancy in their subsequent pregnancies.

Early diagnosis may be made by a combination of measurement of serum human chorionic gonadotrophin B (B-HCG) concentration and transvaginal sonography (TVS) which has a sensitivity rate of 84-88% and specificity of over 95% [2]. This will minimise the attendant diagnostic difficulties and ultimately reduce maternal morbidity and mortality from ectopic pregnancy.

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