An increasing trend of bilateral tubal ectopic gestation reported over the past two decades: a case report and review of literature

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ABSTRACT

Bilateral tubal ectopic pregnancies which are spontaneously conceived are of rare occurrences. Generally, they are diagnosed intraoperatively. There are no guidelines published till date for their management. There has been a reported increase in the incidence of such cases. We present a review of such cases reported over the last two decades and report a similar case which presented to our hospital with acute abdomen and USG suggested hemo-peritoneum with further intraoperative diagnosis of bilateral tubal ectopic managed by left salpingectomy and right salpingostomy.

Keywords: Salpingectomy, Salpingostomy, Ultrasonography

INTRODUCTION

Bilateral tubal ectopic pregnancies are of rare occurrences and those without prior history of ART or ovulation induction are rarest form of extrauterine pregnancy. Due to their unpredictable clinical presentation and intraoperative diagnosis no definite clinical guidelines have been published till date for their management. The Fish and Norris diagnostic criteria accepts only histopathological confirmation of chorionic tissue in both tubes.1 There has been an increase in reporting of such cases over the past two decades. Authors share their experience with such spontaneously conceived bilateral tubal ectopic pregnancy diagnosed and managed at their hospital and reviewed all the cases reported over the past two decades.

CASE REPORT

A 29-year-old Gravida 2, Para 1, living issue 1, with previous full term vaginal delivery one year back presented with two months amenorrhea and acute abdomen in the emergency department of SMS & R. Her urinary pregnancy test was positive. USG suggested massive hemoperitoneum. Her past cycles were regular. No history suggestive of PID, tuberculosis, previous abdominal surgeries done, ovulation induction, infertility treatment in the past or any use of any contraception specially IUCD was elicited. Patient was pale, pulse 110 beats per minute and blood pressure 100 by 60 mm Hg. Abdomen was distended and there was guarding and rigidity on examination. On per vaginal examination cervical motion tenderness was present, uterine size could not be assessed as all fornices full. With provisional diagnosis of ruptured ectopic pregnancy decision for urgent laparotomy was taken. Two units of packed red blood cells (PRBC) and fresh frozen plasma (FFP) were arranged. Her pre-operative hemoglobin was 5 gm/dl, viral markers (HIV, Hepatitis B Ag, Hepatitis C) were negative, PT (INR)-15(1.3). Patient was shifted to operation theatre for exploration after taking high risk consent. The need of post-operative ICU admission and need of blood transfusion explained. The need of salpingectomy was also explained. Abdomen was opened and approximately 2-2.5 liters of blood was drained.
There was ruptured ectopic mass of the size of 3x4 cm on
the ampullo-isthmic portion of left tube with active
ongoing bleeding from the fimbrial end of the same tube
suggestive of tubal abortion. Another 2x3 cm ectopic
mass was present on the ampullary portion of right tube.
Family was appropriately counselled. Left salpingectomy
and Right salpingostomy was performed. Both the
specimen were sent for histopathology which later
confirmed chorionic tissue in both the tubes. Peritoneal
lavage was done, intra-peritoneal drain was put and
abdomen was closed. Patient was given 4 units of PRBC
post-operatively. Patient was transferred to ICU on
ventilator. Post-operative course was uneventful and she
was weaned of the ventilator on the next day. Catheter
drain were removed on day 2. Patient serum beta
human chorionic gonadotropin (HCG) was 120 Miu /ml
on the day of operation which reduced to normal levels
<5 m IU/ml after 4 weeks of serial monitoring. Patient
was discharged on postoperative day 10 after stitch
removal. Hysterosalpingography done 6 months later
showed peritoneal spill on right side. Pre-conceptional
counselling regarding the risk of repeat ectopic was done
patient is under regular follow up.

DISCUSSION

Many cases of bilateral tubal ectopic go unreported
owing to the lack of standardized diagnostic and
management protocols for this clinical entity. Causes of
bilateral tubal ectopic include multiple ovulation,
sequential impregnation, trans peritoneal migration of
trophoblastic cells from one tube to the other.2 Past
history of ovulation induction and ART is significant risk
factor for their reported increasing trend. Case reports
reported by Mock P et al (2001), Jamilani et al, Saghar et
al had past history of ovulation induction/ART.3,5 As the
diagnosis of ectopic is generally based on empty uterine
cavity and unilateral adnexal mass, bilateral adnexal
masses are generally missed. Moreover, these cases
usually present as ruptured ectopic gestation with gross
hemoperitoneum further diminishing their diagnosis on
USG. However, USG diagnosis was possible in cases
reported by Brown et al and Jamilani et al.4,6 Generally,
in patients where the serum beta (HCG) is much higher in
proportion to the period of gestation and ultrasound is
suggestive of ectopic mass the possibility of bilateral
tubal ectopic should be kept in mind. Pre-operative
diagnosis of this entity might help in employing the
early medical management of such cases. USG diagnosis
of this entity might employing the early medical
management as done by Mock P et al.7 Laparotomy is
done when patient is haemodynamically unstable with
gross haemo-peritoneum. But laparoscopy is preferred as
there are less chances of adhesion formation which would
ultimately lead to decreased rates of repeat ectopic.7 Most
of the cases reported presented with acute abdomen hence
laparotomy was the preferred modality, but laparoscopy
was the modality used in the following cases reported.8,13
Such case presented earlier and were generally
hemodynamic stable at the time of presentation.
Salpingectomy is the management of choice but
salpingostomy is offered when family size is not
complete with associated risk of persistent and repeat
ectopic. Bilateral salpingectomy as means to manage
bilateral tubal ectopic were reported in the following
cases reported.8,9,14-18 Bilateral salpingostomy was
performed with the goal of preserving fertility in the
following cases reported.10,12,19-20 Salpingectomy of one
tube and salpingostomy of other tube was performed in
the following cases reported.4,11,13,19,21-26 Salpingostomy
without sutting carries higher rate of intrauterine
pregnancy which may be due to rapid return of tubal
function due to minimal injury to the tubal structures.27
Viable pregnancy after conservative surgery for bilateral
tubal ectopic was reported by Sreeja et al.24 Follow up of
these patients is extremely important so as to assess the
future fertility aspect with this mode of conservative
surgery. Re-laparotomy was done where increasing titer of
beta (HCG) levels were found after the initial surgery,
which on re- exploration showed ectopic mass on the
other contralateral side, thus emphasizing the need to
examine both tubes, ovaries and peritoneal cavity at the
time of surgery to rule out a possibility of simultaneous
ectopic pregnancy.24 The presenting case presented with
acute abdomen and laparotomy was done. Bilateral tubal
ectopic was intraoperative diagnosis managed by
salpingectomy and salpingostomy. There were no
persistent ectopic and the future fertility results are still
awaited.

CONCLUSION

Spontaneously conceived bilateral tubal ectopic are of
rare occurrences but there has been an increase in
reporting of such cases over the last two decades. Patients
of ectopic pregnancy with beta HCG levels much higher in
proportion to the gestational age, the possibility of
bilateral tubal ectopic should be kept in mind. During
USG both adnexa should be carefully examined to rule
out the possibility of bilateral tubal ectopic and the
similar tale of caution should be employed
intraoperatively to exclude their possibility.

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