IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 14, Issue 10 Ver. II (Oct. 2015), PP 42-45
www.iosrjournals.org

Histopathological Study of Ectopic Pregnancies – A Rare case ofBilateral Ectopic Pregnancy

AmruthaGorva[*1], Saritha Karre[2], Satyanarayana Veeragandham[3]
[1]*Assistant Professsor, Kamineni Academy of Medical Sciences, LB Nagar, Hydrabad.*
[2]*Assistant Professsor, Kamineni Institute of Medical Sciences, Narketpally, Nalgonda.*
[3]*Head of Department, Department of Pathology, Kamineni Institute of Medical Sciences, Narketpally, Nalgonda.*

Abstract:*Implantation of blastocyst anywhere else, other than uterine cavity is considered as an ectopic pregnancy. About 95%ofEctopicpregnanciesare implanted in the various segments of the fallopian tubes. Of these most of the implantations are ampullary. The present study aims to analyze the distribution of the ectopic pregnancies at various sites. This is a study done in collaboration with Department of Obstetrics and Gynaecology at Kamineni Institute of Medical Sciences (KIMS) hospital, Narketpally. Twenty three cases of ectopic pregnancies were evaluated in 2years from January 2012 to December 2013. The study included tubal pregnancies (22) and one rare variant ofbilateral ectopic pregnancy. Tissues were processed and histopathologicalfindings were studied on Hematoxylin and Eosin stained sections. Thus, most common ectopic pregnancies were seen in subjects who were on treatment for infertility followed by subjects with previous pelvic infection and intrauterine device.*

Key Words:*Ectopic pregnancies, Ovarian pregnancy, Bilateral ectopic pregnancy, Infertility.*

I. Introduction:

Normally blastocyst implant occurs in the endometrial lining of uterine cavity. Implantation anywhere else,other than uterine cavity is considered as an ectopic pregnancy. It is derived from greek word ektopos-out of place. 95% of ectopic pregnancy occurs in various segments of fallopian tube, of these most are in ampulla, remaining 5% occur in ovary, peritoneal cavity, or within cervix. More recently caesarean scar pregnancies are more common than in past[1]. Ovarian ectopic pregnancy are rare, constitute 3% of all ectopic. Risk factors are same, but use of IUD seems to be disproportionately associated. There are few recorded cases in which ovarian pregnancy went to term with few infants survived[2]. Ovarian pregnancy mimic like tubal pregnancy or a bleeding corpus luteum. Heavy bleeding is seen in 1/3rd of cases. Transvaginal USG has helped in early diagnosis of un-ruptured ovarian pregnancy[3].

II. Materials And Methods:

This is a two years study done from January2012 to December2013at Kamineni Institute of Medical Sciences, Narketpally in a rural area**.**We havereceived23 cases of ectopicpregnancyandtissues were processed and studied on Hematoxylinand Eosin stained sections in relation to site, age, side and associated risk factors.

III. Results:

In our study of ectopic pregnancies,we got 23cases, of which 22 were tubal and one case of bilateral ectopic with one side tubal and other side ovarian pregnancy. This wasacase of primigravida who was on treatment for infertility. Of the remaining 22cases, 10 were on left side and 12 were on right side(Tab:1). In 22 tubal pregnancies majority of them were seen at ampullary region. Most of the patients were between 25-30 years followed by 21-25yrs(Tab:2). The ectopic pregnancy were seen most commonly in subjects, who were on treatment for infertility followed by previous genital infection and those using intrauterine device(Tab:3).

In our study we are highlighting a case ofprimigravida who was on treatment for primary infertilitypresentedwith vaginal bleeding associated with pain abdomen. On Ultrasonography (Fig-1), bilateral ectopic pregnancy with one side ovarian pregnancy and opposite side tubal pregnancy was diagnosed. The patient was taken for laparotomy, during surgery ovarian pregnancy was diagnosed using Spiegelberg criteria[4]. In this case ovary was preserved and only ectopic tissue was removed, the opposite side tube was removed for tubal ectopic and sent for histopathology. Histopathological examination from ovarian ectopic showed well-formed villi and decidualtissue(Fig-2). In tubal ectopic, well formed decidual tissue was seen, on deeper section chorionic villi were seen(Fig-3).

IV. Discussion:

An ectopic pregnancy is characterized by implantation and development of an embryo outside of the uterine cavity[5]. Hertig estimated that ovarian pregnancy occur one in 25000 to 40000 pregnancies [6]. It is characterized by a poor clinical symptomatology and a difficult ultrasound diagnosis. The surgical criteria remain hard to prove [7]. Intrauterine contraceptive devices may also be a cause [8]. As a matter of fact, an intrauterine contraceptive device is found in 14-30% of patients with a nonovarian extra uterine pregnancy, while it is found in proportions ranging from 57-90% of patients with a primary ovarian pregnancy [9-15].Its cause could be explained by altered tubal motility, thereby facilitating the implantation in the ovary [7]. Fertility treatment had also remained important associated risk factor [16].

In our case, patient presented with vaginal bleeding associated with pain abdomen, ultrasound was done, ectopic ovarian pregnancy was confirmed and laparotomy was suggested. Patel etalshowed that the most surgical treatment of ovarian ectopic pregnancy consists of wedge resection and oophorectomy [17, 18]. In our study, an ovarian pregnancy was clearly seen during laparotomy and an ovarian wedge resection was done. Resta et al reported a case of ruptured ovarian ectopic pregnancy despite low levels of beta HCG. In our case there was no rupture and HCG was raised [19]. On histopathological examination, confirmed it as an ovarian ectopic pregnancy.

Diagnosis of ectopic pregnancies is based on the classic description of a cyst with a wide ectogenic outer ring using ultrasound [16,20]. A high index of suspicion is based upon a combination of ultrasound finding, (both gray scale and color Doppler), as well as high levels of serum HCG and sonographic experience [21]. Diagnosis is suspected during laparoscopy or laparotomy and confirmed by histopathology [17,22,23,24].

V. Conclusion:

Early diagnosis by clinical, radiological findings will help unnecessary complications of ectopic pregnancy and histopathological examination will confirm the diagnosis as a part of pathologist's repertoire.

References:

[1]. Cunningham ,Leveno, Bloom , Hauth ,Rouse , Spong. Williams obstetrics,Ectopic pregnancy , 23rd Edition 2010 ; 10:238-254.
[2]. PrapasMeethong ,ManusChalermsanyakorn , Full Term Primary Ovarian Pregnancy with Living Child and Mother: case report, Journal of Obstetrics and Gynaecology ,January 2008, Vol. 16, pp. 71-7661-167.
[3]. Huang J, Jing X, Fan S, Fufan Z, Yiling D, Pixiang P, XiaomengX.Primaryunruptured full term ovarian pregnancy with live female infant: case report,ArchGynecolObstet 2011 Mar;283 Suppl 1:31-3.
[4]. Spiegelberg criteriaFrom Wikipedia, the free encyclopedia http://en.wikipedia.org/wiki/Spiegelberg_criteria
[5]. Bouyer J, Coste J, Fernandez H, Pouly JL, Job-Spira N. Sites of ectopic pregnancy: a 10 year population-based study of 1800 cases. Hum Reprod2002; 17: 3224-3230.
[6]. Gerin-Lajoie L. Discussion of Gerin-Lojoie L. Ovarian pregnancy. Am J ObstetGynecol1951; 62: 920.
[7]. Sergent F, Mauger-Tinlot F, Gravier A, Verspyck E, Marpeau L. Grossessesovariennes: réévaluation des critèresdiagnostiques. J GynecolObstetBiolReprod *(*Paris*)* 2002; 31: 741-746.
[8]. Mehmood SA, Thomas JA. Primary ectopic ovarian pregnancy, report of three cases.JPostgrad Med1985; 31: 219-222.
[9]. Ercal T, Cinar O, Mumcu A, Lacin S, Ozer E. Ovarian pregnancy; relationship to an intrauterine device. Aust N Z J ObstetGynaecol1997; 37: 362-364.
[10]. Bouyer J, Rachou E, Germain E, Fernandez H, Coste J, Pouly JL, et al. Risk factors for extrauterine pregnancy in women using an intrauterine device. FertilSteril2000; 74: 899-908.
[11]. Comstock C, Huston K, Lee W. The ultrasonographic appearance of ovarian ectopic pregnancies.ObstetGynecol2005; 105: 42-45.
[12]. Ghi T, Banfi A, Marconi R, Iaco PD, Pilu G, Aloysio DD, et al. Three dimensional sonographic diagnosis of ovarian pregnancy.Ultrasound ObstetGynecol2005; 26: 102-104.
[13]. Raziel A, Golan A, Pansky M, Ron-El R, Bukovsky I, Caspi E. Ovarian pregnancy: a report of twenty cases in one institution. Am J ObstetGynecol1990; 163: 1182-1185.
[14]. Herbertsson G, Magnusson SS, Benediktsdottir K. Ovarian pregnancy and IUCD use in a defined complete population. ActaObstetGynecolScand1987; 66: 607-610.
[15]. Cabero A, Laso E, Lain JM, Manas C, Escribano I, Calaf J. Increasing incidence of ovarian pregnancy. Eur J ObstetGynecolReprodBiol1989; 31: 227-232.
[16]. SandvierSandstad E, Steir JA. Ovarian pregnancy associated with intrauterine contracepyive device. ActaObstetGynecolScand1987; 66: 137-41.
[17]. Patel Y, Wanyonyi SZ, Rana SF. Laparascopic management of an ovarian ectopic pregnancy: case report. East Afr Med J2008; 85: 201-204.
[18]. Koo YJ, Choi HJ, Im KS, Jung HJ, Kwon YS. Pregnancy outcomes after surgical treatment of ovarian pregnancy.Int J GynecolObstet2011; 11: 97-100.
[19]. Resta S, Fuggetta E, D'Itri F, Evangelista S, Ticino A, Porpora MG. Rupture of Ovarian Pregnancy in a Woman with Low Beta-hCG Levels. Case Rep ObstetGynecol2012: 213169.
[20]. Joseph RJ, Irvine LM. Ovarian ectopic pregnancy: aetiology, diagnosis, and challenges in surgical management. J ObstetGynaecol2012; 32: 472-474.
[21]. Mehra S, Negi H, Hotchandi M. Rare case of Ovarian pregnancy managed by laparascopy: A case report. JK Sci2003; 5: 29-30
[22]. Comstock C, Huston K, Lee W. The ultrasonographic appearance of ovarian ectopic pregnancies.ObstetGynecol2005; 105: 42-45.
[23]. Di Luigi G, Patacchiola F, La Posta V, Bonitatibus A, Ruggeri G, Carta G. Early ovarian pregnancy diagnosed by ultrasound and successfully treated with multidose methotrexate. A case report.ClinExpObstetGynecol2012; 39: 390-393.
[24]. Nadarajah S, Sim LN, Loh SF. Laparscopic management of an ovarian pregnancy. A case report.Singapore Med J2002; 43: 95-96.

Tables:

Table-1: Side Wise Distribution of cases

Side	No of cases
Left Tubal	10
Right Tubal	12
Bilateral (Ovary+Tubal)	1

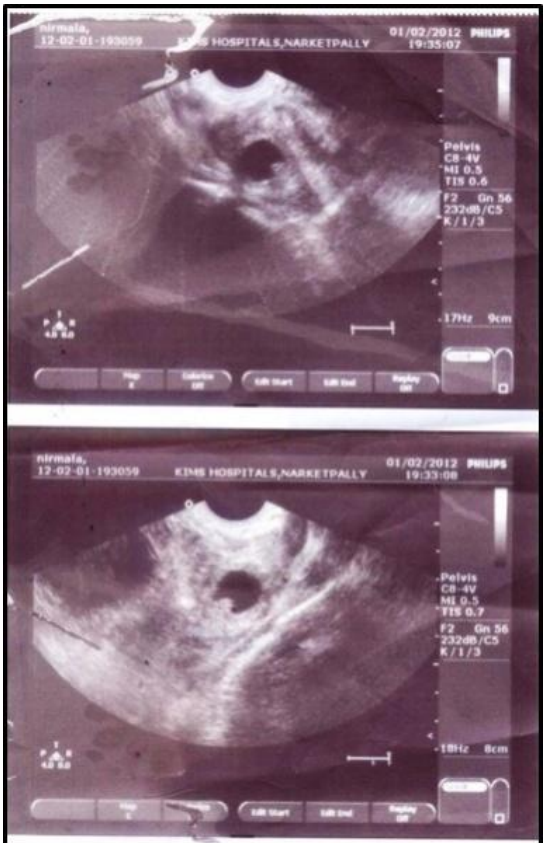
Table-2: Age Wise Distribution of Cases

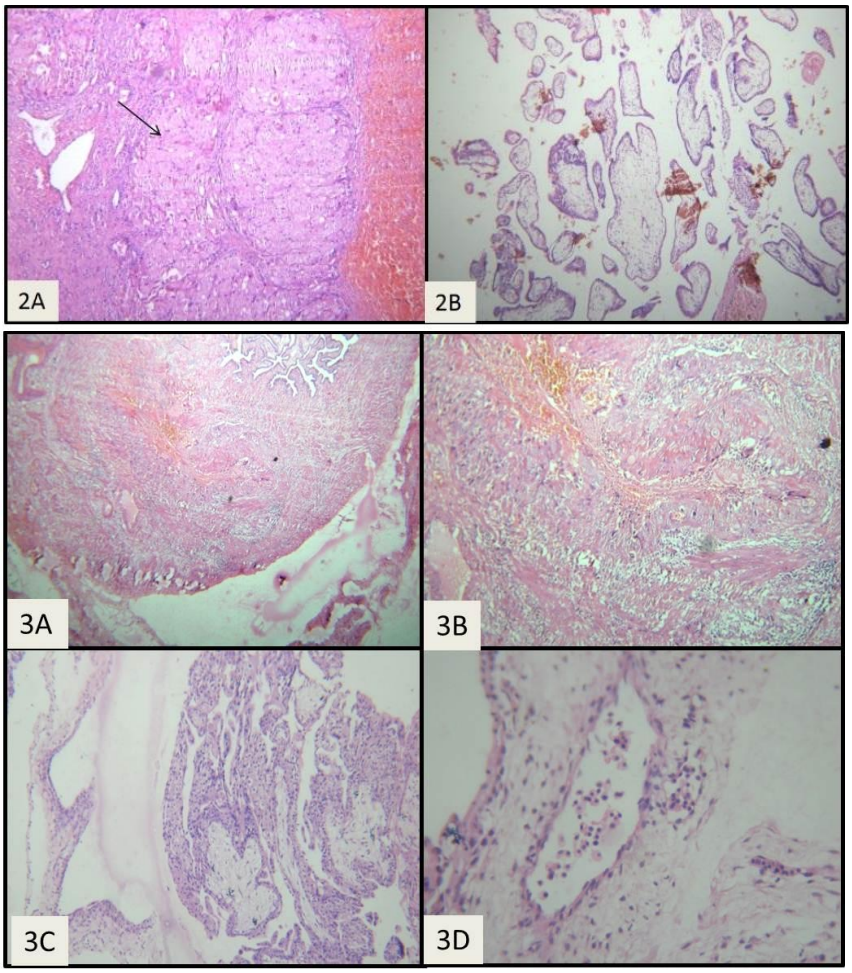
Age in years	Percentage of cases
<20	0 (0%)
20-25	6(26.09%)
26-30	14(60.86%)
>30	3(13.05%)

Table-3: Associated Risk Factors

Risk factors	No of cases
Primi with Infertility treatment	17
Tubal corrective surgery	1
Previous genital infection	3
IUD (Intra uterine device)	2

Pictures:





Legends:

FIGURE1:Minimal fluid noted in right and left iliac fossa. Evidence of Gestational sac outside the uterus with viable yolk sac in right fallopian tube.

FIGURE 2: A-Photomicrograph from right ovary shows plenty of decidualtissue ,haemmorhage (H&E, 400x).B- Chorionic villi lined by trophoblastic epithelium , few syncytial trophoblastic cells (H&E,100x) .

FIGURE 3:A-Photomicrograph of fallopian tube with decidual tissue (H&E,100x), B-Higher magnification of decidual tissue(H&E,400x), C-Lining epithelium of fallopian tube with chorionic villi(H&E,100x), D-Chorionic villi with nucleated RBC(H&E,400x).