

## Vanishing Twin, Natures Choice

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**Abstract :** A surprising finding at emergency Caesarean Section of an empty sac, along with fetus & placenta , was observed. Retrospectively, when USG reports were reviewed it was a case of Vanishing Twin after 20 wks of gestation. This syndrome is diagnosed more frequently since the use of USG has become a common investigation. Probably the twin which vanishes may be chromosomally abnormal. Prognosis of the surviving twin is generally excellent but depends on the etiology of the death of the dead twin. [Saluja J et al NJIRM 2013; 4(5) : 111-113]

**Key Words:** Vanishing Twin, Papyraceous gestational sac.

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**Introduction:** Phenomena of Vanishing Twin was first recognized in 1945. Incidence 1 in 12000 cases (0.008%)<sup>1</sup>. Occurs when one fetus in multi gestational pregnancy dies in uterus early, and is partially or completely reabsorbed. This syndrome has been diagnosed more frequently since the use of ultrasonography in early pregnancy. A surprising finding at emergency Caesarean Section of an empty sac, along with fetus & placenta , was observed in C.R. Gardi Hospital, Ujjain. Retrospectively, when USG reports were reviewed it was a case of one twin vanished after 20 wks of gestation.

**Case Report :** A 30 yrs old G5P3 was admitted with history of 9 month amenorrhoea, pain abdomen and watery discharge per vaginum since 1 day. On general examination there was nothing specific except mild oedema feet. Abdominal examination revealed - pregnancy with transverse lie, FHS 140/min, regular. Vaginal Examination – Cervix 2cm dilated, not effaced, membranes absent, foetal fingers felt. Investigations: Hb – 12gms/dl, Blood grouping & Rh typing – A+ve, RBS – 84mg%, Urine - N A D , VDRL – NR, HbSAG – negative, HIV – negative.

Emergency caesarean section was done for premature rupture of membranes with transverse lie. She delivered male child weighing 2.6 kg. Placenta delivered, along with it a yellowish brown 12x10 cm sac containing a tissue mass of 6x3cm. At this juncture twin pregnancy was suspected. Postoperative period was uneventful and patient discharged on 8<sup>th</sup> day. On enquiring, she gave the reports of previous USG's (table 1). From above third ultrasonography reports it was evident that in

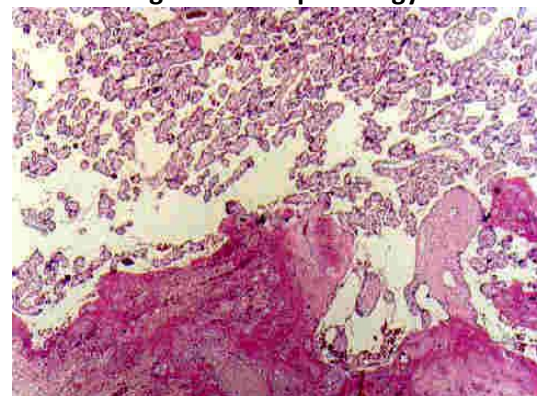
second trimester there was discordant growth of twins. The abdomen circumference differ by more than 20mm. Fourth USG showed only one fetus that means second twin vanished and only sac remained after 20 wks.

**Figure 1: Placenta , along with yellowish brown 12 x 10 cm sac containing a tissue mass 6 x 3 cm**



**HISTOPATHOLOGY:** Placenta with sac showing placental tissue with areas of extensive degeneration. There was a well defined and well delineated plaque of perivillous fibrin deposit which strongly favoured the phenomenon of “vanishing twin”. The foci consisted of chorion lined sac filled with amorphous like material surrounded by degenerative chorionic villi.

**Figure 2:Histopathology**



**Table 1: USG Study Fetus**

No.	1st Twin		2nd Twin		Diagnosis
	Biometry	Gestation (Weeks)	Biometry	Gestation (Weeks)	
1	Gestation sac 24.9mm no fetal pole	7 wks 1 day	Gestation sac 24.9mm no fetal pole	7 wks 1 day	Two gestational sac 7 wks 1 day No fetal pole
2	CRL 24.9mm	9 wks 1 day	CRL 24.9mm	9 wks 1 day	Twin pregnancy 9wks 1 day with cardiac activity
3	BPD-46mm HC-164mm AC-147mm FL-30mm	19.6 wks 19.1 wks 20 wks 19.2wks	21mm 93mm 76mm 14mm	13.3 wks 14.2 wks 14 wks 14.1 wks	Twin Live Fetus <sup>st</sup> 1 fetus 19-20 wks <sup>nd</sup> 2 fetus 13-14wks
<b>Only one fetus</b>					
4	BPD- 82.7mm FL – 62.9 mm AC – 279mm	33 wks 2 days 32 wks 4 days 32 wks 0 days	No comment on 2nd fetus in Sonography reports		Single live fetus with transverse lie 32 wks 4 days + 1 wk
5	BPD- 90.9mm FL– 72.4mm AC – 352mm HC – 330mm	36 wks 6 days 37 wks 1 day 39 wks 1 day 37 wks 4 days	No comment on 2nd fetus in Sonography reports		Single live fetus with transverse lie 37 wks 5 days + 1 wk

Diagnosis Vanished Twins gestational sac with degenerative placenta with vanishing twin phenomena.

**Discussion:** Retrospectively when asked, she was given clomiphene tablet. Since the introduction of gonadotrophin in 1959 and clomiphene citrate in 1961 for ovulation induction, a major increase in multifetal pregnancies has occurred<sup>2</sup>. Careful examination of the Placenta revealed histologic evidence of the vanished twin. With the advent of ultrasound, early loss of a member of a multiple gestation has been identified<sup>3,4</sup> and has been described as “the vanishing twin”<sup>5</sup> or the “vanishing twin syndrome”<sup>6</sup>. There is frequent lack of confirmatory histologic evidence in reported vanishing twins<sup>7</sup>. Rate of vanishing twin reported: 71% of twins diagnosed by USG before 10wks<sup>8</sup>. 63% of twins diagnosed by USG between 10-15 wks. 0% whose multiple gestations diagnosed after 15wks of gestations in same series. To confirm diagnosis of vanishing twin ultrasound and histopathology should be co-related.

**Conclusion:** Clinical outcome of such cases is as per nature’s law of survival of the fittest. Probably the

twin which vanishes may be chromosomally abnormal. The left one fetus as it becomes singleton gets best nutrition and grows normally. The cause of transverse lie in this case is difficult to explain.

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