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## To assess the importance of accurate and early diagnosis of twins and its effect on the management

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### Abstract

**Method:** The present study of twins was done among the patients admitted in the department of Obstetrics and Gynecology at Index Medical College Hospital & Research Centre, Indore.

**Result:** Maximum incidence was found to be in Nullipara i.e. 33.72% (21 cases). Next common was para I (Gravida II) 27.9% (19 cases). Grandmultipara constituted only 1.16% of cases.

Out of 86 patients, 72 patients (83.72%) were diagnosed as twins before delivery of the first baby and in 16.27% (14 patients) diagnosis of twin pregnancy was missed before delivery. Total 14 patients were diagnosed after delivery of first baby (3 patients admitted with 1 baby already delivered outside Hospital and in remaining 11 both babies delivered in Hospital) out of which in 01 patient it was a per-operative finding during LSCS. The indications for LSCS in this case was obstructed labour.

**Conclusion:** Our study revealed the importance of early diagnosis of twins because the subsequent admission of selected cases and delivery by optimal route resulted in lower perinatal mortality (9.6%) compared to perinatal mortality in those cases in which diagnosis was made at the time of delivery (37.5%).

**Keywords:** Diagnosis, twins & management

### Introduction

It is crucial to recognise the twin or multiple pregnancy as early as possible to prepare for the subsequent course of tests and diagnoses. The early diagnosis of multiple gestations is far from accurate, and it has been reported that at least 40% of twin pregnancies are not recognised until 13 weeks of gestation [1].

The major errors in screening and diagnosis can include the underestimation of an ongoing twin pregnancy (“the appearing twin”) or the misdiagnosis of an ongoing singleton pregnancy as one that started as a twin pregnancy or more (“the vanishing twin” phenomenon) [2]. Gestational sacs can be visualised by transvaginal ultrasound at 35 days after the last menstruation in 95% of cases, whereas foetal cardiac activity can be visualised at 44 days [3]. The visualisation of more than one yolk sac inside the gestational sac enables us to accurately define the pregnancy as multiple.

Amniotic membranes are detectable by 7.0 weeks [4]. The close monitoring of biochemical markers of pregnancies achieved by ART often leads to the early suspicion of a multiple pregnancy even when multiple gestational sacs are not yet detectable, as the mean beta-hCG value in multiple gestations is significantly higher than that in singleton pregnancies.

### Material and Method

The present study of twins was done among the patients admitted in the department of Obstetrics and Gynecology at Index Medical College Hospital & Research Centre, Indore from December 2018 to November 2019.

### Methods

1. Detailed History of Patients
2. Examination of patients.
3. Nature, duration and complications of pregnancy and labour.
4. Management of pregnancy and labour.
5. Fetomaternal outcome.

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### Obstetric examination

1. Abdominal shape, size, any scar mark was recorded.
2. Uterus whether over distended, presence or absence of any excessive liquor. By palpating multiplicity of fetal parts detected & presentation, position & attitude of both fetuses were ascertained.
3. Fetal heart sounds located at its maximum intensity, noting their rate & regularity. Presence of two distinct fetal heart sounds with difference of at least 10 beats/minute was taken as diagnostic of twins.
4. Pervaginal examination: done -specially noting dilatation & effacement of cervix, formation of bag of water, presenting part & its relationship with the pelvis. Assessment of pelvic capacity was done by internal examination pervaginal examination repeated after rupture of membranes to exclude cord prolapsed.

### Results

**Table 1:** Relation of Parity with the incidence of twins

Parity	No. of Cases	Percentage (%)
Nullipara	29	33.72
I	24	27.9
II	21	24.4
III	9	10.4
IV	2	2.32
V and above	1	1.16

Maximum incidence was found to be in Nullipara i.e. 33.72% (21 cases). Next common was para I (Gravida II) 27.9% (19 cases). Grandmultipara constituted only 1.16% of cases.

**Table 2:** Table showing Mode of Diagnosis

Mode of Diagnosis	No. of Cases	Percentage (%)
Clinically	5	5.81
Ultrasonography only	7	8.13
Clinically + ultrasonography	60	69.76
X-ray only	-	-
Clinically + X-ray	-	-
After delivery of first baby	14	16.27
Both babies	11	12.79
First baby	3	3.49

Out of 86 patients, 72 patients (83.72%) were diagnosed as twins before delivery of the first baby and in 16.27% (14 patients) diagnosis of twin pregnancy was missed before delivery. Total 14 patients were diagnosed after delivery of first baby (3 patients admitted with 1 baby already delivered outside Hospital and in remaining 11 both babies delivered in Hospital) out of which in 01 patient it was a per-operative finding during LSCS. The indications for LSCS in this case was obstructed labour.

### Discussion

In our study maximum twins were found in Nullipara i.e. 33.72% and next to it was Para-1 (27.9%). Grandmultipara constituted 1.16% of cases. This is in conformity with Rodis JF (1997) [5]. Rodis JF found the incidence of twins to be as high as 35.9% in primigravida and 4 of these 209 Nullipara patients received clomiphene as a part of treatment of primary infertility. In Rodis JF series grandmultipara constituted 3.80% cases which was lowest in his series. Similarly we found grandmultipara as least common group (1.1%) while Greig PC (1992) from this institution reported the incidence of twins highest in Para fifth

and above as 29.8% and least in nulliparas as 10.5% [6]. The one possible explanation for this difference is the overall number of grandmultipara coming to the hospital for delivery has significantly decreased since 1977.

In our study 83.72% patients were diagnosed as having twins before birth of babies while in 16.27% cases twins could be diagnosed after delivery of first baby only.

Andrew & colleagues (1991) also reported 80% cases to be diagnosed antenatally [7]. Now a days because of frequent use of USG diagnosis has become more easy. Before USG only 5 – 50% cases are diagnosed antenatally (Power WF – 1973). By USG twins can be diagnosed even at 6 weeks gestation.

In our study twins were detected only on clinical findings in 5.81% cases while Greig PC reported this figure as 35%, Rodis JF 64.4%, Jacob 61.8%.

### Conclusion

Our study revealed the importance of early diagnosis of twins because the subsequent admission of selected cases and delivery by optimal route resulted in lower perinatal mortality (9.6%) compared to perinatal mortality in those cases in which diagnosis was made at the time of delivery (37.5%).

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