Original research article:

Study of incidence of Abruptio Placentae in rural population in Maharashtra

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Abstract:

Introduction: Abruptio placentae, placenta previa and uterine rupture are main causes of haemorrhage in late pregnancy. ¹During the last few decades risk to both mother and the baby during childbirth, has significantly reduced. This has been possible because of improved socioeconomic status.

Methodology: The present study was conducted during a time period two year. During this study 12,226 patients were delivered at P.R.H., which is the only tertiary health care centre in the district and gets emergency cases from nearby townships and villages within a radiuas of 100kms.

Over same period, out of all delivered women, 136 patients were diagnosed and treated for Abruptio placentae.

Results: Majority(102) of patients in our study i.e.75% are unregistered and directly landed up with this dreaded complication. Most cases cases in study are referred cases from nearby hospitals either government or private. Cases belong to the lower socioeconomic class with illiterate background, unaware about the existing antenatal care facilities. Prevalence of anaemia, pre-eclampsia being the commonest accompaniments in these pregnant women.

Conclusion: Abruptio placentae continues to extract a heavy toll of both fetal and maternal lives in developing countries. The condition mostly occurs suddenly without warning and causes sudden and rapid deterioration in maternal and fetal health. Once abruption takes place, due to whatever reason, life of mother and baby is exposed to great risk.

Keywords: Abruptio placentae, incidence, rural population

Introduction

Abruptio placentae, placenta previa and uterine rupture are main causes of haemorrhage in late pregnancy. ¹During the last few decades risk to both mother and the baby during childbirth, has significantly reduced. This has been possible because of improved socioeconomic status. Proper antenatal care, well developed anaesthetic services, improved operative techniques, newer potent antimicrobial agents and facilities of prompt blood transfusion has undoubtedly reduced mortality due to haemorrhage.

Unfortunately, the extent of improved outcome is not the same throughout the world.²

Abruptio placentae² is the premature separation of normally located placenta from its site of implantation after 28th weeks of gestation and prior to birth of fetus. The term Abruptio placentae continues to extract a heavy toll of both fetal and maternal lives in developing countries. The condition mostly occurs suddenly without warning and causes sudden and rapid deterioration in maternal and fetal health. Once abruption takes place, due to whatever

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reason, life of mother and baby is exposed to great risk. With this view present work was planned to study incidence of Abruptio Placentae in rural population.

Materials and methods

The present study was conducted during a time period two year . During this study 12,226 patients were delivered at P.R.H., which is the only tertiary health care centre in the district and gets emergency cases from nearby townships and villages within a radiuas of 100kms.

Over same period, out of all delivered women, 136 patients were diagnosed and treated for Abruptio placentae.

All women coming to hospital with pregnancy more than 28 weeks and having clinical features suggestive of abruptio placentae were included in the study. All cases were admitted in critical care unit of maternal ward. A detailed history of patients were noted down. All of them were examined and investigated with help of proforma.

Observations& results

TABLE NO.1: INCIDENCE OF ABRUPTIO PLACENTAE

| TOTAL DELIVERIES | NO. OF CASES OF ABRUTIO PLACENTAE | PERCENTAGE |
|------------------|-----------------------------------|------------|
| 12226 | 136 | 1.11 |

TABLE NO.2 :DISTRIBUTION OF CASES AS PER DURATION OF PREGNANCY

| DURATION IN WEEKS | NO. OF CASES | PERCENTAGE |
|-------------------|--------------|------------|
| 28 to 37 | 61 | 45 |
| More than 37 | 75 | 55 |

Majority of cases (55%) of abruption were with pregnancy duration of more than 37 weeks.

TABLE NO.3: DISTRIBUTION OF CASES AS PER DIFFERENT AGE GROUPS

| AGE GROUP (YEAR) | NO. OF CASES | PERCENTAGE |
|------------------|--------------|------------|
| < 20 | 17 | 12.58 |
| 21 to 25 | 56 | 41.17 |
| 26 to 30 | 30 | 22 |
| 31 to 35 | 22 | 16.17 |
| 36 and above | 11 | 8.08 |

TABLE NO.4DISTRIBUTION OF CASES AS PER BOOKED AND UNBOOKED CASES

| | NO. OF CASES | PERCENTAGE |
|----------|--------------|------------|
| Booked | 34 | 25 |
| Unbooked | 102 | 75 |

TABLE NO.5: DISTRIBUTION OF CASES AS PER PARITY

| GRAVIDA DISTRIBUTION | NO. OF CASES | PERCENTAGE |
|----------------------|--------------|------------|
| Primi para | 46 | 33.83 |
| Multipara | 90 | 66.17 |

Discussion

In this study a total of 136 cases of abruption were studied during during a period of two years. During same period, the total no of deliveries were 12226, thus giving an incidence of abruption as 1.11%. Thus one in every 90 delivered women was diagnosed to have abruptio placentae, when compared with other studies, similar incidence to present study was noted in most studies.

Majority(102) of patients in our study i.e.75% are unregistered and directly landed up with this dreaded complication. Most cases cases in study are referred cases from nearby hospitals either government or private. Cases belong to the lower socio-economic class with illiterate background, unaware about the existing antenatal care facilities. Prevalence of anaemia, pre-eclampsia being the commonest accompaniments in these pregnant women.^{5,6}

Majority of women had not attended antenatal clinics during present pregnancy. In the present study 60%(82cases) of cases of abruption had PIH and others had associated complications like anaemia 70%(96cases),hydramnios 20%(28 cases) pre mature

rupture of membranes 8%(11 cases), eclampsia 2%(4 cases), and twins 1%(2 cases). If women had come for regular antenatal care, incidence of above problems could have been reduced, thus reducing overall incidence of abruption. Incidence of abruption in relation to age has remained same in various studies in last decades supporting our observations. Though it is said that the incidence increases with maternal age, majority of cases were found to be in between 20yrs to 25 yrs.

In this study 67% (90) cases were multipara and primipara accounted for 34% (46) of cases.

M.K.K Menon ⁷ showed 1:3 ratio of primi to multigravida. Laxmi and Purandare⁸ showed 78% incidence of abruption in multipara.

Donald⁹ states that the incidence in multipara is 4 times as high as in primipara and lays the blame on rapid repeated child bearing causing unhealthy condition of decidua resulting in pathological condition of implantation site. The mothers nutritional stores too are depleted resulting in negative balance.

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In the present study maximum number 55% (75) of patients were more than 37wks. 45% (61) patients were less than 37 completed weeks. According to Donald⁹, abruption is more common at around 34 weeks of pregnancy.

Conclusion

Abruptio placentae continues to extract a heavy toll of both fetal and maternal lives in developing countries. The condition mostly occurs suddenly without warning and causes sudden and rapid deterioration in maternal and fetal health. Once abruption takes place, due to whatever reason, life of mother and baby is exposed to great risk.

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