OBSTETRIC PROBLEMS IN RURAL INDIA

by

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Majority of the obstetric problems in rural India are the problems of poverty, ignorance, misplaced religious faiths, social taboos, customs and nonavailability of medical aid. More than 80% of the population of India live in villages and nearly 90% of rural population are below poverty line. The gap between two sections of society the educated and the illiterate shows sharply in the country side. Bridging this gap would be conquering socio-economic evils of rural life and consequently diseases linked with them like anaemia, osteomalacia, hypoproteinaemia, malnutrition, and infective hepatitis.

Dearth of medical facilities and lack of trained doctors and midwives further contribute to the obstetric problems. In India, perhaps less than 20% of deliveries receive any form of skilled attention but in the villages even a general medical care is unknown. The poor transport facilities with lack of roads and other means of communication play an important part in delay or non-utilisation of the meagre obstetric services that are available in peripheral block hospitals. Moreover, the orthodoxy and traditional inhibitions make these innocent villagers shy of taking advantage of the existing facilities in nearby towns and peripheral hospitals, resulting in deaths from eclampsia, ruptured uterus and obstructed labour.

In absence of accurate data to assess the rate and causes of maternal mortality in villages reliance has been placed on data collected from random published surveys and records of district and block hospitals in Bihar which is fairly representative of village life in India.

Severe Anaemia in Pregnancy

There are about 10-15 maternal deaths per 1000 births in the villages. About 50% of these deaths are due to Anaemias in Pregnancy.

Whereas the treatment in institutions has been standardised, in the rural areas its management is done by general practitioners with medicines and equipments in the doctor's handbag.

The patient is often seen for the first time in labour with Hb less than 3 gms% and in a state of congestive failure, in surroundings lacking in blood transfusion facilities and medical equipments. The load on the heart and consequent risk of cardiac failure can only be minimised by being generous with sedatives, giving injections of Frusemide to minimise oedema, and cutting short the 2nd stage of labour by application of forceps under pudendal block.

Proper timing of ergometrine injection during the birth of the anterior shoulder would minimise blood loss in a patient who could ill-afford to lose even a few millilitres. Use of antibiotics would minimise the chances of puerperal infection which these patients are so prone to. Following delivery the patient should be

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transferred to a nearby hospital for repeated small packed cell transfusions and frusemide injections to relieve water load. Alternatively, one may depend on iron, folic acid, liver extracts, frusemide and proteins which gradually but steadily pull the patient out of the woods. The babies of these mothers need special care since they are weak, often premature and even if born healthy they are likely to develop anaemia soon due to lack of iron reserves in them. Extra vitamins and iron has to be supplemented in their feeds.

Obstructed Labour

Obstructed or neglected labour enjoys perhaps next best place in the diary of an obstetrician practicing in rural areas. It is a common sight for him to see a dehydrated patient with dry coated tongue, foul acetone breath, hot dry skin, scanty urine, shallow rapid breathing, uterus tonically contracted with thin stretched lower segment where palpation is difficult and yields little information. Vagina is hot and dry. Foetus is long dead in uterus and the mother's condition is in jeopardy with threat of impending rupture. Such a condition may be either due to undetected cephalopelvic disproportion in a primigravida or malpresentation, usually a shoulder presentation with prolapsed hand, in a multigravida. The patient has to be delivered as early as possible either by abdominal route or vaginal route depending upon the conditions, since delay in treatment in the hope of obtaining better facilities often ends in ruptured uterus. Approximately 30% of patients treated for ruptured uterus die and cases of ruptured uterus occur in nearly 1 in 500.

Proper resuscitation with sedation and 5% glucose I.V. drip has to be started before any operative interference, to combat acidosis and forestall shock. Even if the baby is dead caesarean section may be considered the safest and least traumatic when the lower segment is too thinned out and risk of impending rupture looms large.

If the delivery is accomplished by a vaginal procedure injury to uterus, cervix, and vagina must be excluded or treated. Such patients are liable to go into irreversible shock following delivery and this can be prevented by not going into complacency as soon as the baby is out. Occurrence of urinary and faecal fistulae on 8th day may be anticipated and could be prevented to a certain extent by a self-retaining catheter.

It must be kept in mind that these patients had no antenatal care, they completed their term of pregnancy under malnutrition and anaemia, had no chance of immunisation against tetanus and the obstetric interference had been made with intrapartum infection already set in. Protective measures should be taken to avoid complications.

High risk Pregnancy

Lack of education in villages leads to early marriages and hence age at child birth is low. Both prematurity rate and perinatal mortality are high. As the young mother has not grown to her full stature obstructed labour and all its complications are numerous even with small babies.

There is yet another common high risk pregnancy in the rural areas viz. the women with high parity usually suffering from iron, protein and vitamin deficiency anaemias. Malpresentations often occur and with the babies tending to be larger with each succeeding pregnancy disproportion is noted after having several normal deliveries. The greatest danger to

this grand-multipara is her own over confidence since she assumes that whatever she had performed before she can do it again.

It is particularly in this context that message of Medical Termination of Pregnancy Act needs to be brought to the doors of the rural society with vigour, discretion, and speed to prevent a great deal of major obstetric problems.

Cases of malpresentations or disproportion may come in early labour and timely intervention may give better foetal salvage and reduce maternal complications. Facilities for caesarean section are now available in a number of much smaller hospitals. Many obstetric manoeuvres that are obsolete or forgotten in the urban areas have to be occasionally performed in villages. Prolapsed cord may have to be replaced and after a bipolar version leg is brought out before the patient is transferred to a nearby place where caesarean section is possible.

Pre-eclamptic Toxaemia and Eclampsia

Pre-eclamptic toxaemia

Incidence of pre-eclamptic toxaemia is nearly 10% in the countryside and it is usually of the severe type. The management is on orthodox lines with frusemide, restricted salt intake and sedatives. If the blood pressure is not controlled, oedema does not subside and urinary output does not increase the patient is best shifted to the nearest hospital where pregnancy could be terminated by A.R.M. or even by caesarean section when eye changes are present or when the foetus fails to grow. The perinatal mortality in these cases is about 15% due to intrauterine death or prematurity.

Eclampsia

In towns where good institutions exist incidence of eclampsia has been reduced to negligible numbers but in rural areas it still occurs in about 2% of cases. An eclamptic patient often has to be managed under primitive conditions after numerous convulsions. Control of fits with morphia and chlorpromazine given at 4 hourly intervals is often possible. Obstetric management is linked with general treatment for the control of fits. A.R.M. is often followed by forceps application or vacuum extraction depending on the cervical dilatation. Caesarean section may have to be performed in institutions when fits are not controlled in a reasonable time and the cervix is unfavourable.

Osteomalacia

Its incidence has been very much reduced in recent years but one may come across a case occasionally. They are usually seen in women who observe 'purdah', have pregnancies at short intervals, live on a diet deficient in calcium or have faulty food habits resulting in interference with calcium absorption due to excessive amount of phytic acid in predominantly rice or cereal diet.

In these women abortion and premature labour is common, incidence of caesarean section is high and both perinatal and maternal mortality are higher. Inspite of calcium deficiency A.P.H. and P.P.H. are seldom seen. Obstetric management of these cases depends on the degree of softening and collapse of the pelvic bones. Caeserean section is often preferable to difficult vaginal delivery by destructive operations where intra-uterine foetal death has occurred. Lactation is best avoided for fear of loss of calcium in breast milk. Infants of osteomalacic mothers run the risk of developing rickets.

Prevention is more rewarding and is achieved by leading a life in sunshine and fresh air on a diet rich in milk, fish and meat with proper proportion of cereals.

Medical disorders in Pregnancy

About 2% of maternal deaths are due to medical disorders. Apart from anaemia which has already been discussed, infective hepatitis with hepatic coma results in nearly 25% of maternal deaths in this category. The women in villages embark on pregnancy with malnutrition and with the increasing demand for protein as pregnancy advances the liver failure becomes more acute. The viral infection with extra load on the liver due to pregnancy itself makes the prognosis grave. The treatment is usually unsatisfactory. Mild cases of infective hepatitis with jaundice can be treated with diet low in fat, rich in proteins and carbohydrates together with cortisone and by avoiding drugs toxic to liver.

Termination of pregnancy has no place in treatment of mild or severe cases. In severe cases the pregnancy usually ends in premature birth or intra-uterine death of the foetus.

Other medical problems in pregnancy in the rural areas are gastro-intestinal disorders, small pox, malaria, leprosy, pulmonary tuberculosis and heart diseases which may be managed on usual lines. Perinatal mortality is high in all severe cases due to intra-uterine death and prematurity.

Haemorrhages in Pregnancy

Abortions

Haemorrhage in early pregnancy is due to abortions, spontaneous or induced. The latter is usually seen as cases of septic abortion which usually end in septicaemia. The delay in seeking medical help is understandable. Such patients are also reluctant to move to the hospitals for the sake of secrecy. After initiating heavy doses of higher antibiotics they must be hospitalised. Small repeated blood transfusions are needed for quick recovery. Criminal abortions cause at least 65% of abortion deaths due to sepsis, air embolism, heamorrhagic shock and renal failure.

Ectopic Pregnancy

This is often mistaken for abortion as the medical attendant in the rural areas is usually a general practitioner not quite familiar with pelvic examination. They are most often treated on conservative lines as abortion till the patient is in a condition of collapse and the acute pain makes him refer her to a general surgeon as a case of appendicitis. The delay involved in this process results in high mortality.

Antepartum Haemorrhage

Accidental haemorrhage and placenta praevia are two important problems. The incidence of accidental haemorrhage is about twice that of placenta praevia. Antepartum haemorrhage cannot be managed outside the hospital and these cases are best transferred where facilities for A.R.M., caesarean section and blood transfusion are available. In an occasional case it may be advisable to follow unorthodox line of treatment like internal version or plugging according to the needs of the patient. However, with the development in the health services more patients are being brought quickly to hospitals. Maternal mortality in severe cases of accidental haemorrhage continues to remain as high

as 5% even in good hospitals due to lack of facilities for dialysis and non-availability of fibrinogen. In cases of placenta praevia, however, the maternal mortality rate has been reduced to less than 0.5% by early intervention.

Postpartum Haemorrhage

Postpartum haemorrhage and retained placenta account for 2% of deaths from haemorrhage due to greater number of pregnancies in multigravidae in rural areas. No notice of blood loss is usually taken till the patient starts going into shock. Intravenous ergometrine and syntocinon drip with controlled cord traction besides blood transfusion has made the problem easier. In obstinate cases bimanual compression may have to be given for a prolonged period. Intrauterine packing although rarely done may become the last resort to stop the profuse haemorrhage in the rural area before transporting the patient to the nearest hospital especially in cases of cervical and vaginal lacerations. A vulval haematoma may occasionally occur and is best treated under anaesthesia by proper suturing.

Infections

Postpartum and postabortal infections are common in the rural area with poverty breeding squalor in women with protein malnutrition and anaemia. Both genital tract and urinary tract infections are noted. Endotoxic shock has been noted in severe cases of infection with fatal results. Tetanus and Claustridium infections are also not uncommon in the rural areas. Management is on usual lines with broad spectrum antibiotics, cortisone, A.T.S. and A.G.S.

Embolism

Cases of pulmonary embolism, femoral vein thrombosis and thrombophlebitis are occasional with the useful practice of massage and early ambulation as the village people take to manual work earlier than the urban class. Infected emboli, however, result in stray cases of white leg in puerperium.

Conclusions

In a paper like this only general impressions could be conveyed about the obstetric problems which are vast in villages where accurate statistics are seldom maintained.

The magnitude of the challenge is obvious. Whereas it may no longer be necessary to convince pregnant women in the educated society in the towns about the value of antenatal care, in rural areas the masses have to be motivated to take the benefits of antenatal care and come out of their traditional customs and methods of deliveries followed through centuries.

We have to think in terms of ruralisation of obstetric services. In recent years much has been done in this direction but its full development is likely to take some time. In the interim period as an emergency measure Flying Squad Services for rural areas need to be developed with proper transistorised communication system, ambulances, motor boats and even helicopters to render real service in times of floods when the only means of communication are country boats and where distance and inadequate roads prevent an automobile approach.