

## Delivery on Wheels

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### Summary

A retrospective analysis of 29 cases of deliveries in taxi was done over a period of 2 years at L.T.M.G. Hospital, Sion, Mumbai, to evaluate the causes, outcome, complications. The possible clinical errors responsible for such deliveries were identified in 6 patients. Perineal and paraurethral tears were found in more than 65% of cases. The perinatal mortality was 16.8%. Measures to be taken to prevent such taxicab deliveries are discussed and preventive strategies to avoid them are analysed.

### Introduction

Majority of population in India is from rural areas where health care facilities are not easily available. The incidence of home deliveries conducted by untrained personnel is very high. Upadhyay (1975) found that in India, only 20% of the deliveries received any kind of skilled attention. Unfortunately, even in cities like Mumbai, where the health care system is well established, the incidence of deliveries outside the labour ward remains high. Though majority of them deliver at home, few of these deliveries do occur on the way to the hospital. As the taxis are the primary mode of emergency transport for poor patients to reach the public hospital, deliveries on wheels are not very uncommon. This study analyses taxi deliveries to evaluate the causes, outcome and complications and outlines possible preventive measures.

### Methods and Materials

A retrospective analysis of 29 cases of taxicab deliveries over a period of 2 years was done at L.T.M.G. Hospital, Sion.

Home deliveries, roadside deliveries, ambulance deliveries and hospital campus deliveries outside labour ward i.e. lift and casualty deliveries were not included in this series.

All cases on admission were given primary care. The cord was clamped and oxytocin or methergin was given after delivery of placenta. Perineum and paraurethral region were examined for any tears. The patients were given prophylactic antibiotics and tetanus toxoid, if required.

All cases were analysed by taking history from patient or relatives using their OPD and indoor paper. The possible causes for delay in admission leading to such taxicab deliveries were studied and preventive steps suggested.

### Observations and Results

During the study period of 2 years there were 13,970 deliveries. The incidence of taxicabs deliveries was 1:482.

Majority of the patients were between 20-30 years of age. Six patients were primi gravidas, 10 were gravida-two, 9 were gravida-three and 4 were gravida four. Since in multigravidae the duration of labour is shorter, it was logical to find majority of patients multigravidas.

All patients were from lower socioeconomic status. Twenty one of these patients were antenatally registered.

Majority of the patients stayed within 5 kms. distance from our hospital. (Table I).

**Table - I**  
**Distance (Home – Hospital) in kms.**

Distance in Kms.	No. of cases
< 2kms	7
2-5	14
6-10	7
> 10 kms	1

Eight deliveries occurred during night between 11 p.m. to 6 a.m. and 11 during monsoon. This possibly indicates delay in getting access to transport during monsoon or at night, particularly on holidays, and delay in decision making.

Possible errors on the part of clinician occurred in 6 cases, 3 patients were admitted for false labour pains and discharged, while 3 other patients had been sent back from receiving room in early labour.

All the taxicab deliveries occur in the sitting or semisitting position. Fortunately all except one were cephalic deliveries. One patient with breech presentation came with the baby hanging out. It was a fresh still birth. Eight cases had preterm deliveries.

Average time lapse between taxi deliveries and admission was 20 min.

**Table II: Perinatal Outcome**  
**Perinatal mortality**

Macerated still birth	2
Fresh still birth	1
Neonatal death	1
<b>Birth Weight in(kg.)</b>	
Less than 1.5	3
1.5 to 2.5	18
>2.5	8

Perinatal and maternal outcome are shown in

Tables II and III. The postpartum stay was uneventful except in one patient who developed puerperal sepsis. Mean hospital stay was 4 days.

**Table III: Maternal Outcome**

Mean duration of 3 <sup>rd</sup> stage -	15.6 min.
Mean hospital stay -	4.2 days.
Maternal morbidity	
Perineal tear	1
Paraurethral tear	5
Retained placenta	1
Post partum haemorrhage	1
Puerperal sepsis	1

Perinatal and paraurethral tears occurred in almost 65% of cases and were repaired on admission. This included one case of third degree perineal tear.

There were 3 still births, one of which was a fresh still birth due to breech delivery. The cause of neonatal death was prematurity with asphyxia. The three babies weighed <1.5 kg (Table III). Two babies developed infections requiring prolonged antibiotic therapy.

### Discussion

Incidence of home deliveries or deliveries outside hospital is very high in India. Incidence reported in hospital forms only a tip of the iceberg, as majority of such deliveries are unreported. Mehta (1983) found 80% of deliveries in rural India are home deliveries while incidence of such deliveries in urban areas is 40%.

Non-availability of proper roads, transportation and communication is a common problem in rural India. But surprisingly in the city like Mumbai which has a widespread transport system making access to emergency medical care possible, there are occasions of system failure leading to deliveries outside labour wards.

Error on the part of patient or clinician, seasonal variation, strikes or bandhs may cause an unexpected delay leading to occasional deliveries on the way to the hospital in taxicabs. Such unattended deliveries pose a grave risk to mother and baby. There can be an increased risk of trauma, sepsis and neonatal morbidity.

Multiparity and low socioeconomic status were common factors associated with such deliveries correlating with short labour time and lack of compliance with obstetric care. Low socioeconomic status also explains the reliance on taxicab with no alternative mode of private transport available.

Also such deliveries are more likely to occur at night, on holidays or in monsoon season, possibly because of a delay in getting transport or indecisiveness on the part of the patient. Similar findings were also reported by Sheriar et al (1991) and Nayak (1993).

Clinical misjudgement in sending back multiparous patients who may be in the latent phase of labour from OPD or receiving room or discharging indoor patients admitted with false labour without proper instructions and counselling would lead to hesitancy in coming back to the hospital again early enough for fear of being ridiculed or turned away once more.

These unattended taxicab deliveries pose a grave risk to foetus and mother. It is also a psychologically humiliating experience to patient and her family members. Patients should be encouraged to use obstetric care unit in the nearby vicinity. Great care should be taken while sending back patient from recovery room particularly multiparous patients. Also

liberal admission policy for such patients depending on parity, seasonal variations, distance to be travelled by the patient should be adopted.

Proper counselling of antenatal patient regarding indications for reporting to hospital would avoid delay in decision making and eliminate such on the way deliveries.

#### **Acknowledgement**

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#### **References**

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