abscess could not be ruled out in absence of CT scan. Accordingly, he was started on intravenous ceftriaxone 100 mg/kg in two divided doses and cloxacillin 200 mg/kg in four divided doses. All supportive measures were instituted to reduce his intra-cranial tension. There was no improvement in condition and after 36 hours of admission his condition deteriorated suddenly and he could not be revived. Streptococci other than *S. pneumoniae* are seldom found in acute bacterial meningitis cases(4). Meningitis due to *S. pyogenes* usually follows upper respiratory tract infection, otitis media, sinusitis or related to head injury cranial surgery(5). Our patient had untreated unilateral acute suppurative otitis media that might have acted as the focus and led on to purulent meningitis; CSF culture grew *S. pyogenes*. Thus suspicion for GAS meningitis should be borne in mind particularly if there is some other contiguous focus of infection such as otitis media, sinusitis, tonsillitis etc. which should be treated timely and appropriately to prevent complications.

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Thrombocytopenia Following MMR Vaccination

Serious adverse effects following MMR vaccination include Autism, Inflammatory Bowel Disease, Guillain Barre Syndrome, Thrombocytopenia, hypersensitivity reaction. Incidence of thrombocytopenia following MMR Vaccination is 0.5 to 33 cases / 1 million doses(1). In our case patient presented with bleeding tendency following MMR vaccination after 15 days. The sixteen months-old-male child came with petechial rash and spontaneous bruising over forehead and buttocks of 1 day duration and epistaxis of 15 minutes duration. The patient had received MMR vaccine 15 days prior with us. It was not

followed by maculopapular rash, fever or hypersensitivity reaction. There was no history of similar episode following measles vaccine. On general examination vitals were within normal limits, petechial rash all over body ecchymosis over right side of forehead and buttocks was noticed. Patient also had active nasal bleeding which was managed with nasal packing with adrenaline. Investigations revealed Hb = 11.8 gm%, Total Leucocyte count = 9200/cumm, Differential Leucocyte count = N-33%, L-60%, E-04%, M-03%, B-00%, platelet count of 2000/ cumm. In view of active bleeding and Platelet count of 2000/cumm patient was transfused with one unit of single donor platelet immediately. No fresh lesions and active bleeding from any other site was seen after the episode. On the 2nd day the platelet count rose to 1.93 lakhs/cumm. Color of bruises changed from purple to brown on 4th day and platelet count on the same day was 87000/cumm. Patient was discharged from hospital as clinical condition was stable. Patient was followed after 7 days and platelet count was repeated which showed a rise to 4 lakhs/cumm without any active intervention. Clinical diagnosis of thrombocytopenia following MMR vaccination was made considering the fact that patient received MMR vaccine 15 days prior to the episode. Thrombocytopenia caused by MMR vaccine is benign and clinically apparent within two months of immunization and occurs at a rate of one per ten lakhs doses. Based on case reports the risk of vaccine associated thrombocytopenia may be higher for persons who have previously experienced thrombocytopenia especially in temporal association with earlier MMR immunization. No reports of thrombo-cytopenia associated with receipt of MMR vaccine have resulted in death(2). Vaccine adverse reporting system (VAERS), FDA noted that thrombocytopenia following immunization with measles containing vaccine was more severe than previously perceived. Investigators in Finland had reported that 30% of children with thrombo-cytopenia had detectable anti-IIb-IIIa platelet antibodies. FDA's laboratory of pediatric and respiratory diseases imitated a research study to identify vaccine antigens that might be responsible for inducing antiplatelet anti-bodies, indicating that they may be at risk for episodes of immune thrombocytopenia when re-exposed to any vaccine that contain cross reacting antigen.Thrombocytopenia after DTP immunization is less frequent and usually has shorter interval of onset than after MMR. (mean 7 days *vs*. 16 days)(3).

There is an increase risk of ITP within 6 weeks of MMR immunization. However, the attributable risk of ITP within 6 weeks after MMR vaccination is low(4). In our case thrombocytopenia developed after 15 days of MMR vaccination. Immunological studies could not be carried out. The decision to immunize children should be based on benefit of protection against MMR in comparison with risks of recurrence of thrombocytopenia after immunization.

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Priorities in Development of Neonatal Surgery in India

We had prospectively audited outcome of two hundred and sixty one surgical neonates admitted in our unit over a period of one year. One hundred and forty two neonates (54%) presented within the first 48 hours. Babies with surface defects, which were obvious *viz.*, Meningomyelocele invariably presented very early and other babies presented late. Seventy five per cent babies were males and twenty five per cent were females. Ninety per cent of the babies were brought from outside Chandigarh and had to travel long distance on personal transport or public transport. The distances had to be evaluated on the time taken for transportation rather their Km distances. Most of them did not have a pretranspo rtresuscitation or any care during transportation. Fifteen per cent were preterm and sixty seven per cent weighed less than 2500 g. Antenatal period was not supervised in 29% patients. Only 20% of the supervised deliveries had antenatal ultrasound examination. Less than 3% of the babies were referred prenatally with congenital abnormality. The commonest causes of referral were bile stained vomitus, delayed passage of meconium, respiratory distress, excessive oral secretions, difficulty in feeding, delayed passage of urine or absent anal orifice.

The female gender babies were positively discriminated against by the parents in assuring the quality of treatment. The factors that favored survival were birth weight >2.5Kg ($p < 0.05$), absence of tachypnea (Respiration rate <50/m; $p<0.05$) and SpO_2 >94% at admission. Against the requirement of 55 beds, 15 ventilators and 108 nursing staff (as per international norms) we only had 6 ICU beds, 3 ventilators and 26 nursing staff. In order to improve neonatal surgical survival several of these key factors will have to be corrected by the Government of India. Investment in neonatal surgery must be seen as a one-time investment, which results in healthy baby with normal longevity of life. Unless special attention is given by government of India or by UNICEF, WHO and other funding agencies, neonatal surgical mortality will continue to be high in developing countries. Investments on proper antenatal care and antenatal diagnosis will be very effective in improving surgical results.

Acknowledgement

The authors gratefully acknowledge Dr. Ram Samujh and Mrs. Balpinder Kaur for their kind help in the data collection and analysis.

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