

Neonatal Tetanus - A Killer Disease that is Totally Preventable

Pages with reference to book, From 89 To 90

Syed Shakil Ahrnad Rizvi (Liaquat National Hospital, Karachi.)

Tetanus in the neonatal period continues to be a major cause of mortality and morbidity in developing countries around the world. In some of these countries the incidence may reach as high as 8% of all live births and the disease may account for upto 30% of all neonatal deaths. Studies have indicated that of all deaths from tetanus, 45-75% are due to the neonatal form of the disease¹. The fatality rate of neonatal tetanus in Kenya has been noted to be 8 per 1000 live births² and 20.6 per 1000 live births in Northern Nigeria³.

This extremely high frequency and fatality rate of neonatal tetanus in developing countries is related to the conditions surrounding the birth of babies. Most babies are born in unhygienic environments and delivery rarely takes place in a hospital. The infection is acquired through the moist umbilical stump, which is cut with unclean instruments and then tetanus infected material such as cow-dung, Charcoal and rags contaminated with soil or faeces is used as dressings³⁻⁴. The babies, delivered under these circumstances are highly susceptible, more so, in view of little or no immunity transferred from the mother, due to lack of maternal immunisation. Studies indicate that lack of education and poor availability of health facilities account for the low level of maternal immunization.^{2,3,5}.

The mortality from severe tetanus neonatorum is high even in well equipped and experienced units because of the difficulties associated with treatment. Efforts should therefore, be concentrated on its prevention. The following steps, some of which have already met with considerable success in some areas of the developing world, are recommended.

Education of pregnant women regarding the danger of using unclean and contaminated material for cutting and, tying the umbilical cord and covering the stump. They ought to be warned about the high risk of tetanus when aseptic methods are not practised.

2. Training of Traditional Birth Attendants and Midwives in modern techniques of obstetric asepsis, with particular reference to cutting and tying of the umbilical cord.

3. Ensuring that all hospital and maternity units observe conditions where babies are born under strict asepsis.

4. Immunization of all women of childbearing age. If this is not possible in the short term, all pregnant women should certainly be immunised. A simple and effective method is to give 2 doses of Tetanus Toxoid 0.5 ml, intramuscularly 1 month apart, in the last trimester of pregnancy, with only one injection in subsequent pregnancies. Studies carried out by World Health Organisation have demonstrated that this is practical and leads to an appreciable reduction in neonatal tetanus^{1,6-8}. A more recent Egyptian study where immunisation campaign targeting pregnant women from 1988-1993 and a supplementary campaign from 1992-1994 targeting all women of childbearing age in districts where neonatal tetanus rates were highest, resulted in a 85% decline in reported cases during 1988-1994⁵.

Concerted efforts towards prevention by education of the mothers, establishment of aseptic practices at the time of delivery and immunisation of mothers, would largely eradicate this killer disease, which is still so prevalent in the developing world⁵.

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