mal physiologic changes of pregnancy, which result in a decrease in many binding globulins and an increase in plasma volume and also the increased placental vitamin transfer to the fetus from the mother. While it is generally agreed that the scientific evidence for universal vitamin supplementation during pregnancy is ambigious, when undertaken with reason, it represents a benign therapy with potential for improved outcome. Newer data support more conclusively the therapeutic benefit of some vitamin supplementation to prevent spesific diseases. Example is vitamin use for the prevention of neural tube defects. On the other hand, frequently uncontrolled vitamin use, especially of megavitamins, may cause increased risks for pregnancies.

L81

LOW BIRTHWEIGHT

Edmond McLoughney, *UNICEF Representative in Turkey*

In the developing world, low birthweight stems primarily from the mother's poor health and nutrition. Three factors have most impact: the mother's poor nutritional status before conception, short stature (due mostly to undernutrition and infections during her childhood), and poor nutrition during the pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large proportion of foetal growth retardation. Moreover, diseases such as diarrhoea and malaria, which are common in many developing countries, can significantly impair foetal growth if the mother becomes infected while pregnant.

According to the most recent estimates for 145 countries, approximately 14% - or 18 million – newborns each year are low birthweight. The majority of these babies are born in developing countries. South Asia has by far the highest levels, with one out of every four babies born with with low birthweight. More than half of all low birthweight infants in the world are born in South Asia. Low birthweight is also relatively common in Sub-Saharan Africa, and in the Middle East and North Africa, at least 12% and 11%. By contrast, the percentage of low birthweight in the industrialized countries in only 7%.

Weight at birth reflects the intrauterine experience: It is a good indicator not only of a mother's health and nutritianal status but also the newborns' chances for survival, growth, long-term health and psychosocial development.

L82

CONGENITAL CYTOMEGALOVIRUS INFECTION: HEMATOLOGICAL EVOLUTION IN NEWBORN INFANTS TREATED WITH GANCICLOVIR

E.M.A. Diniz, M.S. Grassi, M. Nagaiassu, M.E.J. Ceccon, V.L.J. Krebs, F.A.C Vaz, *Division of Neonatology, Department of Pediatrics, School of Medicine, University of São Paulo, São Paulo, Brazil*

Objective: To verify the hematological evolution of newborns with congenital cytomegalovirus infection treated with Ganciclovir and two type of regimens. Methods: From January 1998 to December 2000, we studied 24 neonates with symptomatic congenital cytomegalovirus infection (CMV) that were admitted to the Neonatal Intensive Care Unit (NICU). The newborns were classified into two groups: 14 neonates were given an initial treatment course of 7.5 mg/Kg twice daily for three weeks, then a maintenance course of 10 mg/Kg three times a week for 3 months (Nigro 1994) (group A) and 10 neonates received 7.5 mg/Kg twice daily for three weeks (group B). Criteria for eligibility were: signs and symptoms compatible with a congenital infection from whom a specimen of urine and blood could be taken in the first 21 days of life. Results: In group A the CMV cultures and CMV DNA of specimens from eleven infants (80%) became sterile. In group B, five infants (50%) had negative CMV culture and CMV DNA results. The clinical features in group A included hepatomegaly (92.8%), splenomegaly (64.2%), anemia (57.1%), jaundice (55%) and petachial rash (55%). Hematological results are shown below: table 1 and table 2.

Table 1 - Group A median values

Ganciclovir treatment	Before	During	After
Hemoglobin (g%)	12.5	10.7	12.1
Neutrophils (mm^3)	4258.5	3378	3215*
Platelets (mm3)	63250	272000	175006

Table 2 - Group B median values

Ganciclovir treatment	Before	During	After
Hemoglobin (g%)	11.4	10.6	10.2
Neutrophils (mm^3)	4700	4079	526*
Platelets (mm^3)	72750	130233	18006

Conclusions: The authors concluded that the newborn infants that had been treated with Ganciclovir for a period of 3 months (group A) presented hematological evolution better than the group that was treated for a period of three weeks (group B) and the majority of newborn infants from group A showed CMV culture e CMV DNA negative shortly after the treatment. It is safe to assume that patients submitted to a prolonged treatment with Ganciclovir respond far better than the ones treated over a shurter period.

L83

ETHICAL ASPECTS OF HIV INFECTION AND REPRODUCTION

J.Schenker, *Israel*

1. HIV infection is a transmissible disease with profound social and psychological implications for the woman, her partner and her family as well as for the health care team and society. Its characteristics include a prolonged latent period, a very high morbidity and mortality and social stigma. In addition, there is as yet no vaccine or curative treatment. Vertical transmission from mother to fetus, or to infant via breast milk may occur. The incidence of this transmission may be reduced by drug therapy.
2. These facts bring sharply into focus the ethical conflict between patient privacy and confidentiality and the need to protect the sexual partners, the health care team and the public from a fatal communicable disease.
3. Because the disease has the potential of reaching epidemic proportions, the overriding consideration of infection control for the whole population comes into tension with the limits of individual rights. As well as aggressive educational programs, other measures that may be considered would be mandatory offering of antenatal screening and confidential disclosure of HIV status to sexual partners and to health care workers at risk of exposure. Information regarding numbers of seropositive individuals should be made available to public health officials.
4. Individuals who are informed of positive serostatus suffer severe psychological sequelae including the sense that they have been given a death sentence. Furthermore discrimination based on seropositivity in regard to housing, jobs and insurance exists. Physicians have a duty, therefore, to provide not only individual counsel and care for paitnets but also public advocacy to protect them from unfair and punitive actions.
5. While appreciating the importance of confidentiality and patient privacy, the ethical responsibility of individual patients to prevent harm to others still exists. Informed consent must be obtained prior to testing for HIV infection and communication of the resultant information. Every effort should be made through counseling to convince individual patients of their responsibility to others including the importance of allowing such information to be used to protect sexual partners and health care workers. If in spite of every effort, consent is not obtained and the risk of transmission is high in certain circumstances, with consultation, it may be justified to override patient confidentiality.
6. Assisted reproductive technology requires the elective donation of gametes, embryos or surrogate carriage of pregnancy. Because of the elective nature of this technology confidential counseling and testing can be done and inclusion of only those with negative HIV status is possible. To protect the in-