Newborn Screening

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Newborn Screening Saves More Babies

Since the start of Phase II, 9 more babies were discovered to have inborn errors of metabolism through newborn screening. Four of them were diagnosed to have congenital hypothyroidism and 5 with congenital adrenal hyperplasia. This brings the total number of confirmed cases of congenital hypothyroidism to 18 (1:4131), and that of congenital adrenal hyperplasia to 10 (1:7435). Babies with congenital hypothyroidism were born in Manila Doctors Hospital, Philippine General Hospital, St. Martin de Porres Charity Hospital, and Quezon City General Hospital, whereas the babies with congenital adrenal hyperplasia were born in FEU-NRMF, Metropolitan Hospital, Our Lady of Lourdes Hospital, and Philippine General Hospital (two of them). All 9 patients consulted with endocrinologists and are taking prescribed medications.

Moreover, out of 244 babies screened from participating hospitals outside of Metro Manila, one born in Angeles University Foundation Medical Center was diagnosed to have congenital hypothyroidism and another born in De la Salle University Medical Center has congenital adrenal hyperplasia. Both patients have consulted with endocrinologists and are taking hormone replacement.

As more and more hospitals offer newborn screening to their patients, an increasing number of babies born with metabolic disorders are being given the chance to live normal, productive lives.

Countdown 2000 continues . . .

Newborn screening takes nothing more than 3 drops of blood and gives in return the chance to live a near-normal life where none would have existed before. Thus, the Perinatal Research Foundation believes and rightly so, that it should be offered to as many newborns as possible. The foundation deeply concerns itself with securing funds to shoulder the screening fees of charity patients. Approximately 50% of the 3,000 patients screened monthly are charity patients needing at least P525,000.00 worth of sponsorships. The amount may seem enormous but only 2,000 individuals sponsoring one child each every month for a period of at least one year are needed. It is as simple as issuing twelve postdated checks worth P 350.00 each to the Perinatal Research Foundation.

Sponsor-A-Child and give our newborns the best of chances.

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Dr. Lourdes Ledesma donates a substantial amount to PNSP.

STUDY UPDATE
October 1998

Patients Screened		**74,349**
Patients With Elevated Results		
CH	105	1:708
CAH	56	1:1,328
GAL	6	1:12,392
PKU	48	1:1,549
HCY	7	1:10,621
Multiple	1	1:37,175
Confirmed Positives		
CH	18	1:4,131
CAH	10	1:7,434
GAL	2	1:37,174
Classical Galactosemia	1	1:74,349
Galactokinase Deficiency	1	1:74,349
PKU	1	1:74,349

The Newborn Screening Study Group: now 41 Hospitals Strong and Still Growing. . .

The Newborn Screening Study Group recently gained 4 more hospitals: 3 in Cebu City and 1 in La Union. Cebu Doctors Hospital, Cebu Velez Hospital, Metro Cebu Community Hospital, and Ilocos Regional and Training Medical Center confirmed their participation in the Philippine Newborn Screening Project this October 1998, and would proceed with the implementation at once. This brings the total of participating hospitals to 41: 30 in Metro Manila, 1 in La Union, 1 in Angeles City, 1 in Cavite, 4 in Cebu City, 1 in Davao City, 1 in Iligan City, and 2 in Cagayan de Oro City.

Moreover, an Orientation Seminar for selected hospitals in the Southern Tagalog Region was held last November 22, 1998, 11:30 to 3:00 P.M., at the Century Park Hotel, Badjao Function Room. Hospitals from this group can commence with the project early in 1999.

G6PD Screen Yields Interesting Results

The pilot study for Glucose-6-Phosphate Dehydrogenase Deficiency which the Newborn Screening Laboratory is presently conducting yields interesting results. Over 16,000 patients have been screened and of this number, 96 have been confirmed through quantitative enzyme assay to have the disorder. Furthermore, recall of patients with initial positive results and running of confirmatory assays are still ongoing, which means that the number of patients with the enzyme deficiency may actually be higher than this number.

Glucose-6-Phosphate Dehydrogenase (G6PD) is an enzyme involved in the maintainance of red blood cell integrity. Deficiency of G6PD in the red blood cells predisposes it to hemolysis upon exposure to highly oxidative substances. G6PD deficient patients may appear normal and would continue to remain in healthy condition as long as oxidative drugs or chemicals are avoided. A G6PD crisis results in severe anemia and, consequently, damage to vital body organs such as the liver, the kidneys, and the brain. Signs and symptoms of the disorder are vague and could often be mistaken for another.

G6PD is an X-linked disorder and is relatively common among Asians than Caucasians. X-linked means that the G6PD gene is located in the X chromosome and transmitted by the mother. Actual incidence in the country has not yet been established.

Erratum

In the "Study Update: July 1998" (August 1998 issue) and "Study Update: August 1998" (September 1998 issue), the total number of patients with elevated results for phenylketonurin (PKU) and galactosemia (GAL) were inadvertently interchanged.

We apologize for the discrepancy.

editorial box

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