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Dangerous Tranquility

In late January 1962 my attention was attracted to an outbreak of congenital malformations in children in Germany and its possible relation to a specific drug. Because of my interest in congenital malformations of the heart I decided to examine the situation myself.

The malformation was phocomelia, which is characterized by reduction in the length of the long bones of the arms or legs, or both. In extreme cases the appendages are reduced to completely functionless nubbins. Occasionally the external ear is absent, and in the most severe cases the visceral organs are badly malformed.

Phocomelia has long been known as a rare malformation. In Germany, a few cases were seen in 1959, more were seen in 1960, and cases in "epidemic" numbers were seen in 1961. By November 1961, W. Lenz of Hamburg and W. G. McBride in Australia suggested that the outbreak was connected with the use of a new sleeping pill and tranquilizer containing thalidomide [alpha-(N-phthalimido)glutarimide]. A. Spiers in Scotland confirmed the relation by showing that the mothers of at least eight out of ten of the affected babies had taken the drug. Thalidomide was on trial in the United States, but fortunately it had not been approved for use by the Food and Drug Administration, owing to the fact that polyneuritis developed in some users and owing also to Dr. Frances O. Kelsey's doubt about the safety of its use in pregnancy.

The drug was first marketed in Germany in 1958, and by 1960 it had become Germany's most popular sleeping tablet and tranquilizer. It was sold without prescription until the polyneuritis showed up; thereafter it was sold freely on prescription.

Thalidomide was withdrawn from the market in Germany by November 1961 and slightly later in England, Australia, and Canada. Much additional circumstantial evidence of the relation between thalidomide and phocomelia has now been collected. Lentz (personal communication) has studied 50 cases of women whose offspring have phocomelia and who had also taken the drug during pregnancy. He finds that the period of sensitivity is between days 30 and 60 after the last menstrual period, and that in most cases the drug had been taken between days 30 and 50. In those cases in which the date of conception was known, the period of sensitivity was from the 28th to the 42nd day.

The most conservative estimate is that by August 1962 some 3500 babies with phocomelia will have been born in Germany and several hundred will have been born in England and elsewhere.

Definite proof that thalidomide does cause phocomelia must await further confirmatory animal experimentation or cessation of the outbreak in August 1962, 8 months after withdrawal of the drug. Nevertheless, the circumstantial evidence that this drug does cause congenital malformations is so strong, and the effects on the children are so terrible, that I feel the situation should be brought to the immediate attention of the public in this country. It is also important to remember that in many instances the damage is done before the mother knows she is pregnant. Therefore, young women must learn to be cautious about new drugs. Until new laws have become effective, and indeed until research for the proper tests on pregnant animals has been completed, physicians must bear in mind that sleeping tablets, tranquilizers, and other apparently innocent drugs may do terrible harm to the rapidly growing embryo and the unborn child.—HELEN B. TAUSSIG, M.D., *Johns Hopkins Hospital, Baltimore, Md.*

(*This editorial is based on a longer editorial to be published soon in the* New England Medical Journal.)