

153 (1735)

The cure of infantile rickets by artificial light and by sunlight.By **ALFRED F. HESS** and **LESTER J. UNGER.***[From the Home for Hebrew Infants, New York.]*

Some years ago we reported an attempt to cure rickets in infants by means of the ultra-violet rays. The results were not conclusive. Since this time Huldshensky has reported cures by this method. During the past winter this therapeutic measure was again employed and its effect followed by means of frequent radiographs of the epiphyses of the long bones. The mercury-vapor lamp was used and exposures of the entire body were made every few days from three to twenty minutes at a distance of 120 to 75 cm. The effect in all cases was curative, as demonstrated both by clinical examination and by the appearance of calcification at the ends of the bones.

Following this success with artificial rays the effect of sunlight on infantile rickets was investigated. To this end infants were exposed, under careful supervision, to the sun's rays in increasing degree. After a period of three to four weeks a similar calcification of the epiphyses was noted, as well as general improvement. This beneficial effect of the sun's rays as well as of the artificial rays was achieved although the diet was in no way altered; some of the babies were receiving, both preceding and during the treatment, dry milk of the same lot.

These results lead to the conclusion that the remarkable seasonal incidence of rickets is due to the seasonal variation of sunlight; that many cases of rickets are due to defective hygiene rather than to dietary errors (although diet is also an etiologic factor in this disorder); that sunlight should be used to prevent and to cure infantile rickets; and that in metabolism studies both on animals and on man, the influence of sunlight must be noted and taken into account.