

A CASE OF UNI-OVULAR TWINS OF WHICH ONE CHILD WAS NORMAL
AND THE OTHER HAD THE SYNDROME OF MONGOLISM

by

J. A. van Beukering, M.D. (Utrecht)

and

J. D. Vervoorn

An African woman of about 40 years old reported to the out-patients' department on 31st January 1955 because of nausea and vomiting, with amenorrhoea of three months duration. Examination revealed a 2-months' pregnancy. She had six normal deliveries of which three children were still living.

On 3rd February she reported again, complaining of stomach-ache and diarrhoea. The stool examination showed some leucocytes and erythrocytes, but no amoebae, cysts or parasitic ova. On 23rd February the woman again reported, this time with a simple pharyngitis. She came again on 29th June for pre-natal examination and treatment. She had no complaints and was seen to be about 32 weeks pregnant, with a moderate degree of hydramnios. The foetal heart was inaudible.

On 1st August she was admitted to hospital in labour. The membranes were intact, the cervix fully dilated and presentation was occipito-anterior of the vertex. Artificial rupture of the membranes released only a small amount of amniotic fluid, but labour proceeded normally with the usual quantity of fluid accompanying the birth. Immediately this child was born another bag of waters presented, which was ruptured to release about six pints of amniotic fluid. A second baby now presented by the breech and was delivered by Bracht's method. We noticed at once that this second baby was affected by mongolism.

The placenta was born a few minutes after delivery of the second child, and it looked as though it belonged to bin-ovular twins. We were convinced that it would be important to determine whether these were uni-ovular or bin-ovular twins, so a piece of the membranous septum was sent to Prof. W. P. Plate (Utrecht), who reported: «It consists of two layers of amnion without intervening chorion, and it is therefore certain that we are here dealing with uni-ovular twins».

The diagnosis of mongolism in the second child was made at first; but in addition to the typical mongoloid facies there were further characteristics of the mongol. There were epicanthus, hyper-mobility of joints and muscular hypotonia, protruding tongue, and Brushfield's typical sign (See photograph). After a few days the skin became dry and scaly. The anterior fontanel of the mongol was much bigger than than of

the other twin. There were no cardiac malformations or herniae, nor were there any typical characteristics of the hands. Without doubt the other twin was quite normal. We could not take finger-prints during the few days the babies were in hospital and there was no opportunity to send blood-samples for grouping.

Mongolism is not so uncommon in Africans, two cases having been seen by us at this hospital from about 700 deliveries during the course of three years. Prof. Mysberg (Utrecht) informs us that there are about one hundred cases reported of twins in which one baby only of each was a mongol. In the cases of proven uni-ovular twins the mongolism has always been obvious in both partners. In bin-ovular twins, sometimes one and sometimes both partners were affected. Unfortunately it has not always been made clear whether these were indeed uni-or bin-ovular twins. In this case which we are here reporting it has been proved histologically that our twins are uni-ovular, and for this reason feel that the publication of our observations will be of scientific interest.

J. Oster¹ (Denmark) collected all the cases of mongolism in twins that have yet been published and we refer to his paper.

¹ J. OSTER: Mongolism. *Opera ex Domo Biol. Herid. Human. Univers. Hafniensis*. Vol. 52 Kobenhavn 1953.