

SURGERY

Separated Siamese Twins

Doctors report successful separation of Siamese twin girls who have now passed their first birthday, marking the first known time both members survived so long after separation.

► A ONE-YEAR-OLD birthday celebrated on Dec. 14 by twin girls in Cleveland was a record-breaking event in medical history as well as in the lives of the baby girls, their parents and doctors.

For these girls were born as Siamese twins. They were separated surgically shortly after birth. And today both are alive and well, thus setting a medical record. Theirs is the first case, so far as is known, of both members of a pair of Siamese twins surviving this long after a separation operation.

Healthy, gaining nicely and "just fine," in the words of one of their doctors, the babies show every sign of continuing to live. A scar extending about an inch and a half down from the level of the breast bone on each baby is all that shows they once were joined.

The story of their birth and separation is reported in the *Journal of the American Medical Association* (Dec. 12) by Drs. Hyatt Reitman, Earl E. Smith and Jac S. Geller, obstetrician, pediatrician and surgeon, of Mount Sinai Hospital, Cleveland.

These separated Siamese twins are completely anonymous. Their names have not appeared in the public press and the medical report does not even give their mother's initials. She is identified only as "a 27-year-old woman" and the babies are called "twin A" and "twin B" in the journal.

Three months before the babies' arrival, Dr. Reitman recognized that their mother was going to have twins. But it was not known that they would be Siamese twins until they were born. Dr. Smith, who examined them shortly after birth, found them completely normal except for the band of flesh connecting them and for a heart murmur in one twin. Simultaneous electrocardiograms taken by Dr. Bernard Brofman showed normal heart rates and rhythms which were not synchronous. This was a sign that the babies had separate blood circulation systems.

The babies were given vitamin K to forestall undue bleeding, penicillin and streptomycin to check any infection, and taken to the operating room where Dr. Geller cut away the band of tissue connecting them.

The separated twins were put in an incubator and given oxygen continuously for six hours after the operation. After two weeks they were doing so well they could be taken home.

Fortunately, these babies did not have any organs or large blood vessels in common and the band connecting them was made up only of flesh and some cartilage from the breast bones.

The original Siamese twins, Eng and

Chang, were joined in much the same way as the year-old Cleveland babies. Examination of their bodies after their deaths showed that the band that connected them was composed mainly of muscle, but, unlike the Cleveland twins, this band did contain a small band of liver tissue, showing that there was some slight sharing of internal organs. Medical authorities have said, however, that it would have been possible to separate Eng and Chang surgically, even in their day over a century ago, before the development of modern aseptic surgery, antibiotics, blood transfusions and modern anesthetics.

The Mouton Siamese twins, also girls, have both survived a separation operation performed in New Orleans. This was just three months ago, however, so they cannot yet be said to have reached the one-year survival record of the Cleveland babies. The Mouton twins were joined at the base of the spine.

A history making operation in Chicago separated the Brodie twins, joined head to head, a year ago, but only one of these boys, Rodney, survived. The other twin, Roger, died a few weeks after the operation.

Successful surgical separation of Siamese twins has apparently been done only three or four times previously. One authority reports three authentic cases with survival of one twin and death of the other. According to another authority, there have been four cases, in one of which both twins survived for six months.

A famous case at the beginning of this century was that of the "Radica-Doodica" Hindu sisters who toured with Barnum and Bailey's circus. At the age of 12, Doodica became critically sick with tuberculosis and a separation was performed to save her twin. Doodica died shortly after the operation but Radica was reported restored to complete health.

Dr. Reitman, who delivered the Cleveland babies, thinks that he and his colleagues may hear of other, so far unreported, successful separation operations after other doctors have read their report.

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MEDICINE

Medical Research Grants Follow Modern Practice

► COMMONWEALTH FUND grants for medical research are following the modern trend in medical practice and education of seeing the patient as a whole, rather than as a case of heart disease or diabetes or

kidney disease, it appears from the 1953 Annual Report.

Sickness, it is believed, can seldom be laid to a single cause. More often it results from the interaction of many aspects of a person's environment, both external and internal. So first priority in the Commonwealth Fund's medical research grants goes to studies primarily concerned with the interaction between the organism and its environment, such as studies of growth and personality, certain types of neuropsychiatric research, and studies of relationships between social environment and chronic disease.

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