Imipramine given, as she refused further E.C.T. At one period she developed a coarse tremor of the limbs so that she dropped objects from her hands. She recovered from this disability when the dose of imipramine was reduced. In her case E.C.T. was also required.

Discussion

During the period covered there were no other fractures in the hospital, and the only other falls recorded in the ward casualty books were during three epileptic attacks. It should be emphasized that falls in a mental hospital may possibly be of considerable legal import and that the records are most carefully kept.

Although the cause of falling in these patients is difficult of proof, a reasonable case can be made for regarding the ones described as due directly to the ingestion of the drug.

Thus:—(1) None of the patients had previously fallen or shown any evidence of motor difficulties or instability. (2) Clinical examination had been uniformly normal. (3) Side-effects, already known to be attributable to the drug, were present. (4) All disturbances disappeared on withdrawal of the drug. (5) There was no unconsciousness, no "black out," and no clinical signs suggesting syncope or epilepsy. (6) One patient (described elsewhere) who ingested 1,500 mg. of imipramine in a "suicidal attempt" suffered from uncontrollable movements of the limbs of a dystonic nature, but not from syncope. (7) Minor falls of blood-pressure have been observed, especially in hypertensive patients. No actual hypotensive syncopal attacks have been seen. (8) The dosage of imipramine did not exceed that recommended by the makers for routine therapeutic administration.

We think that it is therefore possible to say that imipramine may produce disturbance of motor functions, in addition to any hypotensive effect that may be present; also, that from this aspect there are considerable individual differences in tolerance to the drug. In most cases these side-effects are of minor importance, but it should be borne in mind that in some they may lead to serious injury. This would appear to be more probable in the elderly. These observations confirm those made by English (1959), and may represent a serious limitation to the use of the drug.

It should be pointed out that no clinical trials have yet been published in this country and also that early reports can be regarded as no more than encouraging. We would therefore, for the present, advise caution in its use. There is little evidence so far that imipramine can replace E.C.T., which in its modified form has proved extremely safe and effective. Extensive trials will be necessary before the drug can be unreservedly recommended. In the meantime E.C.T. remains the treatment of choice for the severely depressed patient.

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During the 12 months covered by the Family Planning Association's *Annual Report, 1958-9*, 340,000 people attended F.P.A. clinics, 20 new clinics were set up, making a total of 292, run by 242 branches, and at headquarters, on a conservative estimate, there were over 21,000 requests for advice and F.P.A. services.

INFECTIVITY OF THE PRIMARY TUBERCULOUS COMPLEX

SOME COMPLICATIONS IN CHILDHOOD

BY

A. W. DICKIE, M.D., D.C.H.

Senior Hospital Medical Officer, Londonderry

AND

R. D. G. CREERY, M.D., M.R.C.P., D.C.H.

Consultant Paediatrician, South Shields and District

(From the Royal Belfast Hospital for Sick Children)

Recent advances in methods of detection, prevention, and treatment of adult tuberculosis have lowered the incidence of infection and disease in childhood to such an extent that the demand for hospital accommodation for infected children has been greatly reduced. Most paediatric physicians in the British Isles are prepared to treat such children in open children's wards without isolation, but there are those, particularly in the Scandinavian countries, who believe this to be wrong and who regard childhood tuberculosis as potentially infective.

A survey was therefore carried out at the Lissue Branch Hospital of the Royal Belfast Hospital for Sick Children in 1953 and 1954 in an attempt to assess this risk. Out of a total of 374 admissions there were 103 actively tuberculous children. Of these, 72 had simple or complicated hilar adenitis, six had pleural effusions, and one had post-primary pulmonary tuberculosis. There were 13 children with cervical adenitis, five with bone and joint disease, two with mesenteric adenitis, and one each with lupus vulgaris, mastoiditis, chest-wall abscess, and pericarditis. Routine gastric lavages were not carried out on all these children, and only one was given antituberculous chemotherapy (the child with the suspected post-primary disease). The average duration of stay for the whole group was 85 days. Sixty-three children were tuberculin-positive and were presumed to be inactive—48 following natural infection and 15 following B.C.G. vaccination.

Method of Tuberculin-Testing

On admission to the Branch Hospital a diagnostic tuberculin jelly test was applied, irrespective of the tests carried out in the main hospital. This was read as positive or negative in most cases and as doubtful in a few. When the result was doubtful the jelly test was followed by a Mantoux 1/1,000; 10 tuberculin units.

Since the time that this survey was carried out there has been increasing criticism of the efficiency of the tuberculin jelly test. We were aware, even at that time, of the disadvantages of the test, and we therefore took great care in its interpretation. We limited the follow-up tuberculin test to the diagnostic jelly test when we thought the usual criticism of the reading of the test did not apply, as in each case it was clearly negative. This criticism almost always applies to the danger of false-positive results—that is, reaction to the strapping rather than to the tuberculin in the jelly. We feel also that the diagnostic jelly test was sensitive enough for our purpose, because if the individual had developed a primary complex he or she would have reacted quite strongly.

In those cases where the original test was negative, and in all the cases negative to Mantoux 1/1,000, a

Mantoux 1/100 (100 T.U.) was carried out. This means that a child was not considered tuberculin-negative until there was no reaction to 100 T.U. at the end of 72 hours. Thereafter on all tuberculin-negative children a diagnostic jelly test was performed during the first week of every month that the child was in the Branch Hospital. After discharge the patient was recalled to the out-patient department for a further jelly test in six to twelve weeks (occasionally a little later).

Results of the Survey

Of the 209 children who were tuberculin-negative at the beginning it was found possible to follow up 177, and at no time during the period of observation within the hospital or after discharge did any single child develop a tuberculin-positive reaction. It was found impossible to recall 16 other children for their tests after discharge. In order to complete the survey it was necessary to fix a closing date, and at that time there were still nine children in hospital whose average stay was considerably in excess, even at this time, of all other children in the group. Five other children had B.C.G. vaccination during the period under observation. Two children died—one from congestive heart failure following rheumatic carditis and the other after operation for a congenital heart lesion. The average duration of stay in hospital for this group was 58 days.

Discussion

Rarely a child with a primary tuberculous complex might suddenly and without warning develop a post-primary pulmonary lesion which would rapidly become infective and therefore dangerous. Experience both in and out of hospital has shown that this is an extremely uncommon complication, but nevertheless one which does occur on occasion. It was therefore thought wise to have a monthly x-ray examination on each child while in hospital.

Another aspect of the possible spread of tuberculosis in these circumstances is the mobility of the children while in hospital. It was the custom to confine most of them to bed for an initial period of variable duration and to allow more freedom of movement for a longer time each day as they improved. Eventually they were permitted to attend the school in the classroom. Even if the child with tuberculosis was kept relatively isolated in bed, other children suffering from other conditions were given complete freedom of movement in the hospital so that they very often played with the tuberculous children. We feel that in the circumstances the possibility of other children becoming infected would have been high if the children with tuberculosis were infective, but the results have shown that cross-infection did not seem to occur. The one child with a post-primary pulmonary lesion was kept under very close radiographic supervision, and the response to chemotherapy was so rapid that it seems likely that the infectivity of this particular lesion was extremely low or even non-existent. Eight gastric washings were done at regular intervals, and all proved negative on culture.

The low infectivity of childhood pulmonary tuberculosis is probably due to the small size of the primary foci, to their rapid healing, and to the child's habit of swallowing rather than spitting out his sputum.

Experience has also shown that when one child in a family develops a primary complex from an infection outside the home then it is rare for other children in the same family to develop the disease unless they have been in contact with the original case.

There is, however, another extremely important aspect to the nursing of primary tuberculosis in an open children's ward. It is that the source of infection must be found as quickly as possible, particularly if the infecting individual is likely to be visiting the child. On such visits people tend also to pay attention to other children and might well infect them. In other words, the danger lies not with the child as a patient but with the adults or adolescents coming to see him. It therefore was the practice to ask the parents wishing to visit the children not to do so until a clear chest x-ray picture was available. This was arranged on the night of the admission of the child so that parents could be allowed to visit from the following day provided that their chest x-ray films were normal. It was also requested that the other relatives would not visit them unless they had normal chest films.

Summary

Of 374 children admitted to hospital, 209 were tuberculin-negative. Of the latter 177 were tuberculin-tested after discharge.

These children were nursed in normal association with cases of childhood tuberculosis, and it was found that six or more weeks after discharge 177 were still tuberculin-negative—that is, there was no evidence that they had developed primary tuberculosis while in hospital.

The danger of nursing tuberculous children among other children arises not from the child as a patient but from the adults who may visit the child.

Chest radiography of these adults should be carried out with a minimum loss of time so that visiting to the child is not interfered with.

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FOOD AND INDIGESTION

AN INVESTIGATION OF POSSIBLE RELATIONSHIPS

BY

P. H. FRIEDLANDER, M.D., M.R.C.P.

Formerly Leverhulme Scholar, Institute of Clinical Research and Experimental Medicine, Middlesex Hospital, London

I am convinced digestion is the great secret of life.—
SYDNEY SMITH, 1837.

Many people who have no disease of the gastrointestinal tract find that certain foods disagree with them. Such foods are said to be "indigestible" in the sense that the process of digestion involves discomfort and untoward symptoms. Alvarez and Hinshaw (1935) studied 500 patients and suggested several likely mechanisms whereby foods might disagree with people. The response of the gastric acidity to food has been extensively studied by Rehfuess and his colleagues (Bergeim *et al.*, 1919; Fishback *et al.*, 1919a, 1919b; Smith *et al.*, 1919; Miller *et al.*, 1919, 1920a, 1920b, 1920c, 1920d), and the gastric emptying-time after various foods by Wilson *et al.* (1929) and Maile and Scott (1935). However, as the *Lancet* (1935) pointed out, "It is strange how little relation gastric acidity and gastric emptying often bear to actual digestibility of foods, as evidenced by symptoms of 'indigestion' or their absence."