

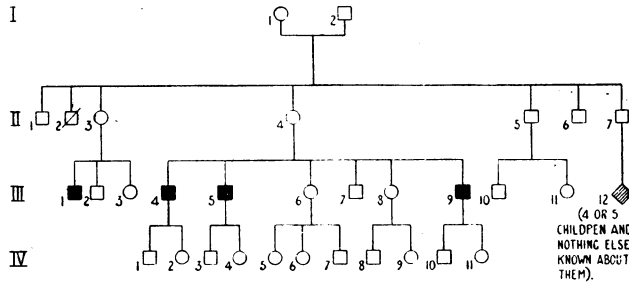
treatment in out-patient clinics, and are afterwards taken home by a responsible relative, but they are able to go to work next day.

Both types of treatment can be repeated—that is to say, in each case a second course can be given at a very short interval. It all depends on how much treatment the patient has had. When a patient has received a course of 40 or 50 treatments by insulin coma it is unusual for further treatment to be necessary for a number of months or years—that is, until there is a genuine relapse. In the case of E.C.T., treatment might have to be continued after a comparatively short interval of a few days or weeks, but the total number of treatments given in fairly close succession should be limited to a comparatively small number. After about twelve treatments E.C.T. tends to have a bad effect on the memory.

#### Inheritance of Retinitis Pigmentosa

**Q.**—The mother of a boy of 6 years has inquired about the chances of the child's developing retinitis pigmentosa, as three of her brothers and a cousin developed this condition between the ages of 30 and 40. The pedigree, so far as information is obtainable, is as shown below. The method used is that suggested by Fraser-Roberts in his book "Medical Genetics." Could you kindly give some indication of the chances of IV 7 developing this condition ?

**A.**—There are two possible explanations for the transmission of retinitis pigmentosa shown in this excellent pedigree: the gene may be sex-linked or recessive. That two sisters should have affected children, all four of them boys, rather strongly favours the first hypothesis. If so III 6 has a one-in-two chance of carrying the gene herself, and if she does so the chance that she has passed it on to IV 7 is also one in two; the chance that the latter will develop the disease is therefore one in four.



I 1 and 2 was a cousin marriage; II 5 wore very thick glasses but was not considered to have retinitis pigmentosa; III 2 is 35 years old and is not affected; III 7 is 40 and not affected; III 10 is 35 and not affected; III 6 is the inquirer; IV 7 is the child in question; III 2 died at the age of 20.

On the other hand, recessive transmission, though not so likely, is by no means impossible. Given a recessive gene, the probability of getting four affected boys, two normal boys, and three normal girls in the two sibships is not particularly small. The chance that two sisters should both have happened to marry carriers of the gene is much smaller. Against this low probability must be set the fact that recessive retinitis pigmentosa is much commoner than the sex-linked type. If inheritance is recessive, the chance that IV 7 will develop the disease is negligible. The mother could be told that one of two types of inheritance is involved. If the inheritance is of one kind the chance is very small indeed—less than 1 in 100; if it is the other type—and unfortunately this is rather more likely—the chance is one in four. Incidentally, the cousin marriage in generation I is a red herring in this instance and has no bearing on the interpretation.

#### Fragilitas Ossium

**Q.**—Is there any treatment for fragilitas ossium congenita? If thymus gland is indicated, what are the details of administration ?

**A.**—There is no curative treatment for osteogenesis imperfecta or fragilitas ossium. The suggestion by Secord (*Proc. Mayo Clin.*, 1936, 11, 1) that there may be some possible value in thymus-gland extract has not been confirmed. This group of cases of disordered bone development is dependent on a

"chemistry of genetics." Like some other unfavourable genetic influences, it may vary in intensity of expression and effect even in the several affected members of a family, and may also in some reveal a tendency to slow spontaneous improvement, especially with fragilitas ossium. Whilst fragilitas ossium has nothing to do with nutritional deficiency, it should be recognized that an associated avitaminosis D in such a case would seriously aggravate the tendency to fractures. This is well illustrated in the case recorded by Snapper (*Medical Clinics on Bone Diseases: A Text and Atlas*, 1943, New York), in which a negative calcium balance was converted to a positive balance by 12,000 units of vitamin D per day, this being accompanied by a disappearance of limb pains.

#### NOTES AND COMMENTS

**Stainless Steel Dentures.**—Mr. N. J. AINSWORTH (Director of Prosthetics, Royal Dental Hospital) writes: Under the heading "Any Questions?" (November 26, p. 1246) an otherwise excellent answer to a question on the use of stainless steel dentures is marred by a mis-statement. It is not true to say that "powerful and expensive presses are necessary to mould it to the shape of the jaw." Such presses are in common use, but an equally good result is possible in the hands of a skilled mechanic using the same methods as are used for the shaping of wrought gold plates, only greater care and time are required and possibly three metal dies and counterdies instead of two. Further, if stainless steel is used, as the questioner seems to imply, as a surface to a plastic plate this combination is readily achieved and gives the ease and closeness of adaptation of a plastic material and the hardness and strength of stainless steel. It remains true, of course, that the acrylic plastics are quicker and simpler to make, better in appearance and therefore much more popular though less durable, but the incorrect though widely held belief to which I have drawn attention is responsible for the undeserved neglect of a most valuable dental material.

**Surgical Dexterity.**—Dr. THOMAS GIBSON (Torquay) writes: In your recent obituary notice of the late Professor T. P. McMurray (November 26, p. 1236), Sir Harry Platt mentions an incident in which McMurray displayed his wonderful dexterity with the scalpel. Reading this, my memory recalled a somewhat similar incident, which I witnessed as a student at the Edinburgh Royal Infirmary in the early 'nineties of the last century. The theatre was crowded with spectators, including, as on the Liverpool occasion, a number of visiting surgeons, who had come to see Thomas Annondale, the dapper little professor of clinical surgery, perform some big operation. "Tommy" was remarkably expert with the knife, and he also dearly loved showing off. So, before starting the big operation, he arranged, as a sort of curtain raiser, to do a quite simple operation, namely the removal of an adenoma from a woman's breast. With one incision he went through skin, subcutaneous tissue, and capsule, shelled out the tumour with his hand, tossed it into the air, caught it like a cricket ball, and then smilingly bowed to his astonished audience. The whole thing was done in a flash, and might be described as a piece of surgical jugglery. I confess that while I vividly remember this trivial operation I have clean forgotten what the big one was.

#### Corrections

In the first leading article in the *Journal* of January 7 there was an unfortunate misprint (p. 62). A reference to the work of "Fields and Woods" should, of course, have read "Fildes and Woods."

Describing WHO fellowships in the *Journal* of December 10, 1949 (p. 1363), we said that full details about them can be obtained from the General Secretary at Geneva. We understand that inquirers should write to the Ministry of Health, Whitehall, London, S.W.1, and not to the General Secretary.

In the news paragraph headed "Treatment of Anthrax, Botulism, and Snake-bite" (December 31, 1949, p. 1537) the telephone number of the Nottingham City Hospital, Hucknall Road, Nottingham, should have been given as 66292 and not 42554.

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