ing without principles. Dr. Cabot has asked for results and I believe that I can show them. In spite of everything that has been said to the contrary, I am still of the opinion that in active tuberculosis rest is the most powerful therapeutic agent we have at the present time. And I have serious doubts as to whether it is possible to push it to extremes so long as the disease is active. You might notice that the word "exercise" was not mentioned in the paper. When it is time for exercise I am as firm a believer in it as anybody, but I do not believe in exercise so long as the tuberculosis is active. So long as it is active I do not believe you can push the rest to an extreme.

EPIDIDYMYTOMY

THE RADICAL OPERATIVE TREATMENT OF EPIDIDYMITIS

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No operative procedure which has been recently suggested has given more gratifying results to both the surgeon and the patient than that for the relief and cure of acute epididymitis. The comparatively easily attained results are all that could be desired by the surgeon and are almost miraculous in the immediate relief they bring to the suffering patient. The relief is so immediate as to render the continuance of the internal administration of sedatives and opiates as well as the loathsome external applications entirely unnecessary. After the operation, the abatement of the fever takes place in twenty-four and not more than forty-eight hours, as a rule, and in from four to eight days the patient is able to resume his usual duties if not too violent. In view of these facts, and since I believe that this operation is devoid of risk to the patient's life, if accomplished with proper aseptic surgical surroundings, it seems to me that it should be the procedure of choice.

Epididymotomy (incision and opening of the epididymis) is an entirely rational procedure based on an accurate study of the pathology of the existing lesions. The catarrhal inflammation present causes the secretion of a varying quantity of serous fluid by the tubular glands of the epididymis, and frequently there is an exudation of some of this fluid into the tunica vaginalis, forming a hydrocele. The usual symptoms of the disease, swelling, tenderness, pain, dragging, etc., are proportionate to the amount of fluid secreted. Consequently, the liberation of the fluid from its sacs of restriction immediately relieves all symptoms.

It is customary for patients with epididymitis to appear for treatment some days after the onset of the symptoms, when pus and abscess formation will in all probability be present. If, however, the disease can be arrested in its first stages by the method under consideration, this pus and abscess formation can usually be avoided. Thus it argues that in an attack mild in character and seemingly amenable to medicinal treatment, the operative plan is more expedient, obviating as it does the possibility of future development of pus and abscess; but if the disease has progressed to the point of pus, this pus is usually confined in the intertubular connective tissues, and the abscess formed is small. It is rare that the focus of the abscess is large except in old and neglected cases. Again, the judicious method of treatment is to open the abscess and liberate the pus.

The operation which I perform is one of comparative simplicity, being a modification of that suggested by Hagner of Washington, D. C. The time required for its

accomplishment is short, rarely being more than from five to ten minutes. The preparation of the patient is the same as that for the administration of a general anesthetic, as local anesthesia is not advisable. The local sterilization of the scrotum may be accomplished in any satisfactory manner, but I have always used the simple method of applying a weak alcoholic iodine solution (from 2 to 3 per cent.) after the parts were properly shaved; always with the precaution of applying the iodine solution only after the skin is thoroughly dried.

The incision in the scrotum is made over the most prominent portion of the swelling. It varies usually from 2 to 4 inches, but should be of sufficient length to allow of the delivery of the testicle, which is wrapped in cloths moistened with warm sterile water or saline solution. A small incision is made in the tunica vaginalis which allows the fluid of the hydrocele to escape. Then the portion of the epididymis which is inflamed is punctured in numerous places with a blunt probe or grooved director. This relieves the tension by allowing the restricted fluid to escape. If pus is present, it will be seen escaping from the punctures, in which case an incision is made in the epididymis in its longitudinal axis to allow free drainage. A probe directed into the pus focus with the addition of mild pressure will free the focus of the greater parts of the pus. After thorough washing of the organ with warm normal saline solution, a short drain composed of a half dozen strands of silkworm gut is inserted into the pus focus. The testicle is returned to the scrotum, which has previously been cleansed with warm normal saline solution, the subcutaneous tissues united by one or two sutures of small catgut, and the skin united by silkworm gut sutures, with the drain passing out at the lower angle of the wound. When the swelling is great, it may be necessary to observe certain precautions to prevent the silkworm gut sutures from tearing out of the inflamed friable tissues, in which case I make use of the button suture, which fulfils this requirement admirably.

After the operation, a simple gauze dressing is applied which I change at the end of forty-eight hours, when I remove the drainage, if present. During this period a T bandage supports the scrotum. One other gauze dressing is usually all that is necessary and is removed on the fifth or sixth day following the operation when the silkworm gut sutures are removed. Most patients are fitted with suspensory bandages and allowed to be out of bed from the third to the fifth day and return to their usual duties from the fourth to the eighth day.

If no pus focus is discovered, the testicle is returned to the scrotum with no drainage, the convalescence being simpler and quicker.

The immediate results of this operation in acute cases are astonishing. The pain vanishes at once, the swelling disappears rapidly, and the tenderness subsides with the swelling. The patient is comfortable from the time he recovers from the anesthetic.

The remote results of the operation are just as remarkable when it is considered that relapses never occur. In a series of one hundred cases, in which I have operated in twenty-five, I know of no relapses. The most gratifying results occur in acute cases or in cases in which the tissues have not become permanently swollen and indurated. The pain is relieved instantly in all cases, but the less the induration, the more rapid and complete will be the return to normal in size and shape of the testicle, and the less apt there is to be occlusion of the vas deferens and the epididymis with the resulting sterility, especially if the attack be bilateral.

I am unable to state the influence of epididymotomy on sterility. But from the logical point of view it appears to me that a patient will have a far greater opportunity to recover without the occlusion of the vas deferens or epididymis if the continuity of the inflammation is aborted and the products of the inflammation are removed. I cannot understand how the operation itself would cause the obliteration of either the vas deferens or the epididymis. Any influence it has shortens the course of the disease and carries away the products of the inflammation. Doubtless it has the same beneficial effect on the retaining of a patulous canal as it has on the disease itself.

In conclusion, it is my belief that epididymotomy should be the treatment of choice in all cases of epididymitis, whether caused by traumatism or by infection with either the gonococcus or other organism. Every case from the mildest to the most severe should be operated on as:

1. The relief from pain is instantaneous.
2. Internal administration of sedatives and opiates and loathsome external applications are unnecessary.
3. The abatement of fever takes place in from twenty-four to forty-eight hours.
4. Pus and abscess formation is prevented.
5. Swelling, tenderness and other symptoms rapidly disappear.
6. There is no tendency to relapse.
7. It insures a minimum of time lost from usual activities.
8. There is probably a smaller percentage of sterility following the disease.

MENTAL DEFICIENCY AND DELINQUENCY

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Just now, while the vice question is being considered from so many sides and various causes for sexual immorality are being studied, with the hope of improving conditions if possible, it will not be amiss to direct attention to one group of young girls who for some reason have been unable to cope with the conditions confronting them and so have "gone wrong." Special stress is being laid on such causes as inadequate wages, and natural immoral tendencies on the part of the girls themselves as being important contributory factors. The State Training School for Girls at Geneva has at present a population of approximately four hundred children, the vast majority of whom have been committed for sexual immorality, and of whom, on admission, nearly 60 per cent. are suffering from a venereal disease.

Why has all this immorality occurred? At present it is of course impossible to answer this question absolutely, but there is one great cause which has never received the consideration to which it seems entitled, namely, mental deficiency.

Most of the children sent to Geneva have been held as purely delinquent. With the exception of those coming from the Juvenile Court in Chicago, none have received a mental examination, and if it has been recognized that they are not "bright," it has been noted merely as an incidental fact, not as having a bearing on the child's delinquency. The child is sent to Geneva with the idea that a year or two, or perhaps five, of hygienic existence, with good food, regular hours of sleep and an abundance of fresh air, will eliminate the immoral tend-

encies and give that physical and mental impetus which may make possible a wholesome, useful womanhood.

It will be well to explain here that by no means all of the girls who come into the courts find their way to Geneva. With the establishment of juvenile courts for the hearing of all cases of this kind, there has developed a tendency to continue the hearings from time to time, either allowing the child to remain in her own home or placing her in some suitable family home subject to the friendly supervision of a probation officer. So successful has this system become that only a comparatively small proportion of the girls appearing in the juvenile courts ever enter an institution, and those who do finally arrive in Geneva are, as a rule, incorrigible offenders whom the courts have entirely failed to control. As an exception to this general type of old offenders may be taken a certain number of cases sent from communities which have no system of juvenile supervision, and which frequently commit girls for very minor offenses or even because of simple financial dependence. This custom of sending dependent children or those guilty of the mild offenses to an institution, compelling them to associate there with hardened offenders and degenerates, cannot be too severely condemned. The majority of the inmates in Geneva, then, are those who have failed to respond to the ordinary measures of supervision possible in their own homes and constitute a comparatively small percentage of all of the cases which the courts handle.

Simple observation and daily work with these girls showed a surprisingly large number who were quite irresponsible and were totally unable, even after having been given years of careful attention, to do the work of normal children either in or out of school. Recognition of this fact led to the routine application of the Binet tests, as modified by Dr. Goddard for American children, to all new subjects admitted, for the purpose of making a rapid estimate of the mental status of the children. The results obtained were startling and indicated that mental deficiency was associated with delinquency in a far larger number of cases than even the most pessimistic had supposed.

Of the total number examined, 105, or 89 per cent., were graded as feeble-minded, that is, showed a retardation of three years or more; seven, or 6 per cent., were backward, being one or two years retarded; and six, or 5 per cent., were graded as normal. It will be remembered that dependent as well as delinquent children may be sent to Geneva, and since three of the normal and five of the backward children were simply dependent, the number of feeble-minded among the delinquent become even more striking. Of the 118 children admitted, fourteen were committed as dependent or as uncontrollable at home, and none of these had been sexually immoral. Of the 104 remaining, all of whom had been sexually immoral, 101 were graded as feeble-minded and three as normal. According to the Binet tests, then, 97 per cent. of the children sent to this institution because of sexual immorality are feeble-minded as well.

Of this group of delinquents by far the larger proportion are of the weak-willed, irresponsible type, who react readily to whatever environment may surround them. These girls are usually friendly and anxious to please everyone and frequently do very well under careful supervision, but when left to their own resources they are a constant menace to themselves and to society. As an example of this type we have Pearl S., who was 18 years old when sent to Geneva and for some months previously had been working at a meager wage in an overalls factory. During this time she had repeatedly