Combination Promin and Streptomycin Therapy for Tuberculosis

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Antibiotics have been assuming a greater place in our armamentarium for the treatment of tuberculosis. Various drugs have been tried from time to time. Some of them have been discarded completely; others have been used for specific types of cases.

As time has gone on, it has become evident that dosages were entirely erratic and, further, that a combination of some of these drugs might be more efficacious.

An unusual experience (discussed in Case No. 1) resulted in the use of promin in the treatment of renal tuberculosis. The result was so dramatic that unhesitatingly this drug was used in the treatment of two more cases. In the meantime, streptomycin had become available. During the months that streptomycin was used, the necessity of smaller doses was realized, at least in the average case. Since excellent results had previously been obtained with promin in the treatment of renal tuberculosis and with the thought that a combination of promin and streptomycin might be more effective, or at least allow a decrease in the dosage of streptomycin, a combination of these two drugs has been administered in a few cases.

The streptomycin was given for a two-week period and then the patients were given a week of rest without treatment. The streptomycin was given in $\frac{1}{4}$ gram dosage twice daily. This regime was continued until they had received a total of approximately sixty grams of streptomycin. During the time that streptomycin was administered, two grams of promin was also given intravenously by one injection daily. This was given for a six-day period, and omitted the seventh day. It was given again for six days followed by an eight-day rest. This regimen was continued during the time that the patient was on streptomycin therapy.

All types of tuberculosis are being treated by this program, and it is my impression that the results are fully as good as when larger doses of streptomycin alone were used. However, this series of patients is small and the period of observation is short.

The last two cases of renal tuberculosis were treated by a combination of streptomycin and promin as given above. The results have been fully as dramatic as when promin was used. It was of
interest that this treatment had no effect on a tuberculous orchitis and tuberculous epididymitis except that when these lesions were excised, the wound healed promptly. Summaries of the renal tuberculosis cases are presented in order to stimulate further interest in the use of this combination by others.

Case No. 1: J.J., age 52, a white male. This patient was first seen in October, 1945. History revealed that kidney trouble had been present since 1918 which came to a climax first in February, 1944, when he was first cystoscoped and was told that he had tuberculosis of both kidneys. He was again cystoscoped at a later date and the diagnosis of bilateral renal tuberculosis was confirmed. When seen in October, he was having marked frequency, burning and smarting on urination, together with pain in the kidney regions. The urine was loaded with tubercle bacilli.

Streptomycin was not available to a private practitioner at this time and it was impossible to get the patient to a Veterans Administration Hospital for immediate treatment. Therefore, promin was finally resorted to as an alternative means of treatment. The patient was given two grams of promin in solution intravenously each day for twenty-four days with the exception of the second day when he was given four grams. The increased dosage on the second day caused considerable headache and, as a consequence, the dose was resumed at two grams per day. At the end of this period of treatment, the patient's symptoms had completely disappeared.

However, in July, he had an injury to the kidney regions after which reactivation of his symptoms occurred. He was given two more injections of promin and again his symptoms disappeared completely.

The patient was not seen again until February of 1947 at which time he reported that he had been to the Veterans Administration for another cystoscopic examination the previous week when no evidence of active renal tuberculosis was demonstrated. In February he was apparently healthy, gaining weight, and had no urinary symptoms.

Case No. 2: F.J.K., age 32, white male. This patient developed pain in the lower back in September, 1947, when he also had pus in the urine. In October, he developed pain in the right leg suggestive of sciatica. In November he went to an osteopath and from that time on lost weight rather rapidly. His urinary symptoms consisted of an increase in day frequency and he voided three or four times each night. He also had burning and smarting on urination.

In November he had an x-ray inspection in our Miniature Film Survey when far advanced, bilateral pulmonary tuberculosis was diagnosed and he was advised to enter the sanatorium. However, before he could be admitted, the right testicle became swollen and was painful on pressure. This involvement eventually included both the testicle and the epididymis.

The patient was admitted to the sanatorium on December 19, 1947, at which time the urine was positive for tubercle bacilli. He was immediately started on streptomycin and promin therapy. One week later arrangements were finally made for a cystoscopic examination. Retrograde pyelograms at this time revealed evidence of tuberculosis of the right kidney and ureter. However, specimens of urine obtained at this time were negative for tubercle bacilli on guinea pig inoculation. All
other specimens obtained since have been negative for tubercle bacilli. Streptomycin and promin had no evident effect on the tuberculosis of the testicle and epididymis. On February 7, 1948, the right testicle and epididymis were removed surgically. The one point of interest was that the operative wound healed immediately and has remained so.

After approximately ten days of streptomycin and promin therapy, the patient's symptoms disappeared. He is still being continued on the treatment.

Case No. 3: U.P.D., age 27, white female. This patient's first symptoms date to 1942 following the birth of a normal baby. She then developed bladder pain, high fever, burning and smarting on urination with pain in the left kidney region. Cystoscopic examination revealed evidence of tuberculosis of the left kidney which was then removed.

She had had some pain of the lower abdomen with frequency and some burning and smarting since this operation. This became worse in the summer of 1946, and the symptoms never improved. Sulfa drug did not improve the condition. Later tubercle bacilli were found in the urine.

After consultation with an urologist, it was decided that this patient should not be cystoscoped, at least until after a trial of streptomycin and promin therapy, because she had already had one kidney removed. Therefore she was admitted to the sanatorium and immediately started on streptomycin and promin. Within three weeks her symptoms had disappeared. The urine became negative for tubercle bacilli at the end of five days and has remained negative. She is being continued on this regimen of treatment.

SUMMARY

1) Case reports are presented to stimulate interest in the use of streptomycin and promin as a combination in the treatment of tuberculosis and especially in renal tuberculosis.

2) The series of cases presented is small and the period of treatment short, therefore the results are merely suggestive of a new trend of thought which we think worthy of further consideration by other clinicians.

RESUMEN

1) Se presentan informes de casos para estimular el interés en el empleo de la estreptomicina y la promina combinadas en el tratamiento de la tuberculosis, y especialmente de la tuberculosis renal.

2) La serie de casos presentados es pequeña y el periodo de tratamiento corto; por consiguiente, los resultados meramente sugieren una nueva idea que creemos merece la consideración adicional de otros clínicos.