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PEYRONIE'S DISEASE ASSOCIATED WITH DUPUYTREN'S CONTRACTURE

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Among the diseases of the penis, Peyronie's disease occupies a very interesting and unique position when it is associated with Dupuytren's contracture. Kirby in 1850 was the first to describe this association.

Until recent years the surgeon treated Dupuytren's contracture and the urologist treated Peyronie's disease with very little inquiry as to whether both conditions might be present in the same patient. In 1928, Polkey found 22 cases of associated Peyronie's disease and Dupuytren's contracture in the literature.

The authors became interested in the associated occurrence of these two conditions and questioned patients presenting either disease in regard to the other.

Many of the patients seen on the surgical service with Dupuytren's contracture were frank to admit that the penis curved when erect, although this history would never have been given unless specific inquiry had been made. Likewise, many of the patients seen because of Peyronie's disease had definite Dupuytren's contracture, although they were not concerned about the condition of the hands.

In both conditions, the patient usually waits until the disease is rather far advanced before seeking medical care.

Heite and Siebrecht, in an effort to determine the incidence of Peyronie's disease in Germany, studied 6038 males in a camp recently and found 455 cases of Dupuytren's contracture, 14 cases of Peyronie's disease and 10 cases of Dupuytren's contracture associated with Peyronie's disease. They found that fibrosis of the male breast was also often associated with these two diseases. No women were in this camp so they believed that trauma could not have played a role in the etiology of Peyronie's disease. They felt that cessation of sex functions, poor nourishment and lack of sex hormone production in these patients might have been responsible for the high incidence found. They felt that in the tunica albuginea, there were certain embryonal developmental tendencies, which following stimuli, would react with proliferation of fibrous tissue and metaplasia. They observed that hormonal changes which occur in older men on a deficient diet might be responsible.

We wish to report the findings in ten patients who had both Peyronie's disease and Dupuytren's contracture.

The youngest patient was 48 years of age while the oldest was 67. The average age was 57 years. The youngest patient ever seen with Peyronie's disease at this clinic was 42 years of age while the oldest was 78. Other authors report the occurrence in much younger patients, but this has not been our experience.

Among the group of patients studied there were 5 farmers or ranchers, 1 salesman, 1 post office clerk, 1 refinery worker, 1 railroad conductor, and 1 university professor.

Three of the patients were first seen because of Dupuytren's contracture while four of this group were chiefly concerned with Peyronie's disease. Three patients were found to have both conditions on examination for diabetes, hernia and heart disease.

The etiology is unknown. Trauma, gout, diabetes, arthritis, old age, vitamin E deficiency, and hormonal changes in subcutaneous anlage have been advanced as factors in the production of both conditions. Frequently our patients noticed that Peyronie's disease first became evident after the death, divorce, or serious illness of the wife, or other conditions which required abstinence from sexual relations. All of the patients of Heite and Siebrecht were isolated in a camp.

In about half of our patients, trauma could have played a role in the etiology of both conditions, although in the other half this certainly could not have been true.

Penile induration and curvature along with some degree of Dupuytren's contracture was present in all of the cases studied in this group. Pain on erection occurred in seven and some loss of potency in four. Both hands were involved by Dupuytren's contracture in eight, the right hand in one, and the left hand in another.

Although frequent mention is made in the literature suggesting that heredity is an outstanding predisposing factor, we were unable to demonstrate this in our series. Numerous diseases were associated with these two conditions; however we felt that none played any role in the production of either Peyronie's disease or Dupuytren's contracture. One patient had duodenal ulcer, one a right inguinal hernia, one heart disease and four had benign prostatic hypertrophy.

PATHOLOGY AND HISTOLOGY

Many authors have described the histologic similarity between Peyronie's disease and Dupuytren's contracture. Twenty years ago Hertzler stated that the disease usually starts in middle life with an indurated area on the dorsum of the penis. The induration may occur on the side of the penis and cause a lateral curvature rather than an upright curvature. These growths arise from oblique discs involving the tissues of the corpora cavernosa and the septum between them. The lesion is hard yet elastic. The skin glides freely over it. When the organ is flaccid nothing can be seen on inspection. It is only on palpation and erection that the lesion becomes obvious. The lesions are made up of dense fibrous tissue, the bundles of which may interlace and form wavy bundles. Hertzler stated that they were very difficult to section and that the nuclei were small, sparse, and spindleform. In both conditions he found a lack of inflammatory cell reaction and felt that there was a definite relationship between the two conditions.

In 1946, Steinberg reported cures in 6 of 7 patients with Dupuytren's contracture, treated with vitamin E. He believed that early and moderately advanced Dupuytren's contracture could be successfully treated by vitamin E by mouth. He later found that some patients had recurrence after vitamin E had been discontinued. Scott and Scardino treated 23 patients with Peyronie's disease, six of these having both Dupuytren's contracture and Peyronie's disease with alpha-

tocopherol with good results to fair response in all but 2 patients. The condition was unchanged in these two patients. This treatment was used with the consideration that Peyronie's disease might be secondary to vitamin E deficiency.

The patients in our series were treated with 100 mg. of alpha-tocopherol 3 times a day for 6 to 12 months. We observed no untoward effects from the administration of the drug over this period of time.

In most cases, the results were better than we had expected and the patients were satisfied with their improvement.

Four of our patients improved greatly and four moderately. Two felt that there was some improvement in both conditions.

Whether alpha-tocopherol improves these patients because of vitamin E deficiency or for some other unknown reason, we are unable to say. However, histopathologic and clinical studies of Peyronie's disease and Dupuytren's contracture have been made by several investigators and a great similarity between the two conditions has been found. Callomon discussed the etiology and pathogenesis of the two conditions in great detail in 1945. We should expect, therefore that any drug which benefits the one disease should also help the other.

We do not mean to infer by this paper that Dupuytren's contracture alone is treated by alpha-tocopherol at this clinic. Most of these cases have been operated on with good results by our surgeons. It has been our experience, however, that the treatment of Peyronie's disease by surgery, radium or x-ray irradiation gave results which were disappointing. Since most of the patients were benefited by treatment with alpha-tocopherol we feel that further investigation along this line is justified.

SUMMARY

Ten patients with Peyronie's disease associated with Dupuytren's contracture are reported.

The similarity between the two conditions is discussed.

Most of the patients were benefited by treatment with alpha-tocopherol and the results seem to warrant further investigation with this method of treatment.

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