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MENTALITY AND DYSTROPHY

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INTRODUCTION

"Dystrophy"—or better "posttraumatic dystrophy"—is taken to mean the state which may arise following injuries of or surgery on a limb and which is characterized by oedema, fibrosis, and stiffness as well as various vegetative disturbances. It is a serious complication which may entail permanent sequelae, but despite numerous investigations its exact cause and pathogenesis remain unelucidated and constant matters of discussion. However, there is a general feeling that the patients' mentality is a factor in the development of the syndrome. Many surgeons claim that they are able to foretell whether a patient is going to develop a state of postoperative dystrophy or not.

It was the object of the present study to try to elucidate whether the mental state actually does exert such a marked influence upon the occurrence of the dystrophic syndrome.

MATERIAL AND METHODS

At the Department of Hand Surgery of the Orthopaedic Hospital, Copenhagen, about 100 patients with Dupuytren's contracture undergo operation *per annum*. This makes up a large, uniform material. Since, moreover, patients with Dupuytren's contracture have proved particularly liable to develop postoperative oedema, fibrosis and stiffness of the hand, we chose this group for our investigations.

At first the surgeon tried to estimate, prior to the operation, whether the patients were of a type that would develop postoperative dystrophy. However, the surgeon's impression very seldom fitted, and the actual study was therefore carried out in collaboration with a psychiatrist.

Preoperatively, all the patients were seen by the psychiatrist who assessed their character and gave a statement containing a presumption

regarding the postoperative course. The surgeon was not cognizant of the contents of this statement, and all the patients were subjected to the same surgical procedure and after-treatment. A few months later, the postoperative course presumed by the psychiatrist was then compared with the real course. So far, this study includes 33 male patients.

A priori, it might be expected that the traits needed to develop a state of dystrophy would be of the hysteriform, "martyr type" nature, but 2 patients with a history of dystrophy showed sthenic, self-asserting, and querulous traits to an extent which bordered on a characterogenic paranoia and which were not believed to be secondary to operation or complications. Bearing these findings and reflections in mind, an attempt was made to trace—in candidates for operations on Dupuytren's contracture—sthenic, self-asserting traits combined with hysteriform reactions and thereby foretell a protracted postoperative course.

RESULTS

As already mentioned, the material comprises 33 males. From the table it will be seen that 30 out of 33 had a postoperative course in conformity with that expected by the psychiatrist.

In 24 cases the psychiatrist did not believe there was a risk of a protracted course. Among these patients there were 5 who were normal, 5 demented and old, and 14 who displayed unstable traits. All had a quiet postoperative course and had recovered in less than 2 months. In 5 cases the psychiatrist did find traits which might be imagined to give rise to postoperative complications, but these patients were not believed to possess sufficient strength of character to maintain this state for any length of time. This fitted in 3 cases who had a fairly prolonged course of oedema, fibrosis, and stiffness, but were restituted in about 3 months, while 2 had a completely uneventful course.

In 4 cases the psychiatrist expected a serious risk of protracted postoperative complications, possibly with permanent sequelae, finding a sthenic character as well as the special features which are believed to make up the basis of postoperative complications. These four patients will be described in some detail.

No. I. was described as being aggressive, paranoid, aggrieved and self-opinionated. The psychiatrist feared a troublesome postoperative course. And indeed, the patient developed severe postoperative complications, a full-blown state of dystrophy, and 4 months after the operation the hand was not yet fully restituted.

No. II. was designated as a bitter, dissatisfied, self-centred person with hysteriform traits, so he was expected to develop dystrophy. His postoperative complications were accurately localized to the operated finger which was stiff and swollen for a long time—and it was 4 months before he had recovered.

Psychiatric assessment	No. of cases	Presumed postoperative course	Actural post-operative course conformable	Acutal post-operative course not conformable
Normal	5	Uncomplicated	5	–
Unstable	14	Uncomplicated	14	–
Demented and arteriosclerotic	5	Uncomplicated	5	–
Aggression inhibited Deafeatist attitude Self-pitying Perfectionistic *Non*-sthenic	5	Short-lasting difficulties in restitution	3	2
Aggression inhibited Martyr type Self-pitying Aggressive Self-opinionated Ambitious Hysterical Sthenic	4	Long-lasting severe complications	3	1
Total number	33		30	3

No. III. was a difficult patient who was characterized as being an emotional, clingy person with sexual neurosis. Primarily it was not believed that postoperative complications would occur, as the patient stated—as soon as the examination had been started—that after an operation he was suffering from urinary incontinence and always wore a diaper. The psychiatrist was, therefore, inclined to put his abnormal features down to this account, but it was later found that he was not suffering from urinary incontinence at all. He must, therefore, be classified as an hysteriac, and this affords the explanation of the protracted postoperative course of oedema, fibrosis, and stiffness for 4 months.

No. IV. was described as an inteelligent, sthenic ambitious person with hysteriform traits who was expected to develop a state of dystrophy. However, in this case the postoperative course was entirely uneventful. The patient was remarkably energetic in training his hand. It must be presumed that for some reason or other his ambitious character has manifested itself in the striking rapidity with which he got going again, while under different conditions the same traits might have given rise to dystrophy.

CONCLUSION

On the basis of the present studies it may be concluded that an interested psychiatrist who has familiarized himself with these special problems can foretell with great likelihood whether postoperative complications—in the form of oedema, fibrosis, and stiffness—are going to occur in a candidate for surgery on Dupuytren's contracture. This is of great importance, both in fixing operative indications and in trying to penetrate the aetiology and pathogenesis of the condition called dystrophy.

SUMMARY

The object of the present study is to try to elucidate whether the mental state of the patient influences the occurrence of postoperative dystrophic syndrome.

33 male patients with Dupuytren were seen preoperatively by the psychiatrist who assessed their character and gave a statement presumption regarding the postoperative course. The surgeon was not cognizant of the content of this statement.

Some months after the operation the postoperative course presumed by the psychiatrist was compared with the real course.

In 30 out of 33 patients there was conformity between the preoperative psychiatric statement and the real postoperative course, and the conclusion is that an interested psychiatrist can foretell in a great deal of cases whether a hand operation will be complicated by postoperative dystrophic symptoms or not.

RESUME

L'objet de la présente étude est d'essayer d'établir si l'état mental du malade présente une influence par rapport à l'apparition d'un syndrome dystrophique post-opératoire.

33 hommes souffrant de dupuytren ont été examinés préalablement à l'opération par un psychiâtre qui a jugé de leur caractère et donné une présomption de l'évolution post-opératoire. Le chirurgien n'avait pas connaissance de la teneur du rapport.

Quelques mois après l'opération, l'évolution post-opératoire présumée par le psychiâtre a été comparée à l'évolution réelle de l'état du malade.

Chez 30 des 33 malades, il y avait conformité entre le rapport psychiâtrique pré-opératoire et l'évolution post-opératoire de l'état du malade. La conclusion en est que dans un grand nombre de cas un psychiâtre compétent peut prédire si une opération de la main donnera lieu à des complications dystrophiques post-opératoires ou non.

ZUSAMMENFASSUNG

Der Zweck der gegenwärtigen Untersuchung ist zu ermitteln ob der geistige Zustand des Patienten einen Einfluss auf das Vorkommen des postoperativen dystrophischen Syndroms hat.

33 männliche Patienten mit Dupuytren wurden vor der Operation vom Psychiater untersucht, der ihren Charakter beurteilte und eine Erklärung mit Hinsicht auf den mutmasslichen postoperativen Verlauf abgab. Der Chirurg hatte keinerlei Kenntnis von dem Inhalt dieser Erklärung.

Einige Monate nach der Operation wurde der vom Psychiater vemutete postoperative Verlauf mit dem wirklichen Verlauf verglichen.

Bei 30 von 33 Patienten war ein Übereinstimmung zwischen der preoperativen psychiatrischen Aussage und dem wirklichen postoperativen Verlauf vorhanden. Die Schlussfolgerung ist, dass ein interessierter Psychiater in einem grossen Teil der Fälle voraussagen kann, ob eine Handoperation durch postoperative dystrophische Symptome kompliziert werden wird oder nicht.