J Forensic Sci, Oct. 1977, Vol. 22, No. 4

I. N. Perr,[1] *M.D., J.D.*

Psychiatric Evaluation of Traumatic Impotence: Evolution of a Case

A problem facing medicolegal examiners is evaluating the uncommon case in which scientific knowledge and clinical experience are often limited and in which relevant information is derived from a number of disciplines. Many experts are confronted with situations that occur rarely in the course of one individual's practice and yet one can formulate a reasonable opinion with review and collation of applicable information and coordinated input from different professionals. Particularly in psychiatric cases, or those with psychiatric implications, evaluators may react on the basis of their own set or bias [*1*] as well as countertransference attitudes. When a case involves an unclear diagnosis of one of the participants, non-psychiatrists are perhaps even more likely to attribute these events to psychologic phenomena, some of which can be utilized in a disparaging or demeaning fashion.

Unfortunately, adequate analysis often requires considerable research that requires expenditures of time and money. Similarly, new scientific modalities may be evolving that can be of considerable assistance in a comprehensive evaluation. The physician must keep in mind that his major obligation is to express an opinion based on reasonable medical probability within the limits of current knowledge and technique.

While the problem of impotence in its varied forms is quite common, traumatic impotence and its variables have not been a widely explored phenomenon. Perr, in an unpublished study in traumatic impotence and the law, reports the evaluation of three cases and discusses the issues and techniques involved in the appraisal of such a case. This paper reports in detail one such case, which is also discussed in two accompanying articles dealing with techniques of evaluation and the lawyer's role in the medicolegal handling of such a case [*2,3*]. The well-trained and flexible psychiatrist is perhaps uniquely qualified to coordinate multidisciplinary efforts in evaluations requiring appraisal of organic and psychological factors because of a background in medical psychology, organic brain disease, and general medicine.

Report of a Case

Background

Mr. X, a 51-year-old white married man, was referred for evaluation by his attorney after review of the case by an excellent neurosurgeon, Dr. A, who did not find specific neurologic deficit as an explanation for his impotence but noted conversion phenomena,

Presented at the 29th Annual Meeting of the American Academy of Forensic Sciences, San Diego, Calif., 17 Feb. 1977. Received for publication 7 March 1977; accepted for publication 21 March 1977.

[1] Professor of psychiatry and professor of community medicine, Rutgers Medical School, College of Medicine and Dentistry of New Jersey, Piscataway, N.J. 08854.

psychophysiologic stress reaction, depression, and posttraumatic sequellae. He was felt to be "nearly totally disabled by the psychological overlay." Mr. X was initially evaluated by me for 5 h in April, 1975 and took the MMPI (Minnesota Multiphasic Personality Inventory) tests.

Review of the Medical Records

Mr. X had sustained a straddle-type injury to his penis, testicles, and perineum on 15 Oct. 1973. He was seen at the emergency room of the C Hospital, where he was given an antibiotic ointment, tetanus injection, and pain medication for urethral bleeding, swelling and ecchymosis of the scrotum, hematuria, and accompanying pain. He also injured his left knee.

Dr. B, a urologist who saw him on 26 Oct. 1973, noted the above injuries and that he was on tetracycline for an upper respiratory infection. Moderate ecchymosis on the right side of the penile scrotal junction was present, whereas the left side seemed normal. The right testis was enlarged and quite tender. The epididymis was thickened and tender. The prostate was enlarged, intensely tender, and poorly drained. The preliminary diagnosis was traumatic epididymitis, urethritis, prostatitis, and urethral stricture. Some hematuria was noted at that time on urinalysis, as it was on November 5. An intravenous pyelogram revealed a normal urinary excretory system; antibiotics were continued.

Mr. X was hospitalized from 28 to 30 Jan. 1974 at the C Hospital with a diagnosis of hematuria, prostatitis, and traumatic arthritis of the left patella. Cystoscopy and retrograde pyelogram were negative. Mr. X complained bitterly about pain in the urogenital area. While at the C Hospital, he was seen by Dr. C, an orthopedist, who had seen him previously at the office. X-ray studies were negative, and there was no evidence of ligament or cartilage damage. Intraarticular cortisone injections were suggested but refused by the patient. The picture was complicated by "overlying psychological problems" which "interfered with interpretation" of the findings. At various times the patient was described by Dr. B as being "highly emotional" (1 Feb. 1974) and with "his usual gamut of impossible complaints" (18 Feb. 1974). Urinalysis in February, 1974 was normal. Mr. X continued to complain in particular of testicular discomfort and left flank discomfort. Dr. C's report of October, 1973 indicated a "definite incomplete tear of the left medial tibial collateral ligament with a possible associated tear of the medial meniscus" and that a knee immobilizer splint was utilized.

Another orthopedic report (Dr. D) of 8 May 1974 reported direct and acute tenderness over the inner left knee. Tentative diagnosis was probable tear in the medial meniscus of the left knee and traumatic chondromalacia of the patella. A urologic report (Dr. E) of 15 May 1974 reported a tender urethra, normal scrotal contents, a nontender prostate, urinalysis with occasional red cells with a diagnosis of urethritis, and a questionable impotence secondary to trauma. Prognosis as to impotence was given as poor with the statement that most impotence is psychogenic in origin and difficult to treat. He was seen on one occasion.

A report by Dr. F (specialty unknown) of 23 May 1974 reviewed the situation. The complaints at that time included likely psychologic ones such as dizziness, light-headedness, cloudy vision, nervousness, poor sleep, panicky feelings, occasional palpitations as well as discomfort in his left knee, pain in the testicles, loss of libido, and impotence. Dr. F thought that the clinical picture was accompanied by severe anxiety and tension state and estimated neuropsychiatric disability as "20% of partial total." Dr. F, apparently not a psychiatrist, was not listed in the directory of medical specialists.

Dr. A in his report of 12 Feb. 1975 also reviewed the past data, the numerous consultations, and the patient's multifold reactions. The long, detailed descriptions of Mr. X's symptoms included his walking with a stiff left leg and a knee cage. Sensory complaints

not substantiated by neurologic abnormality were noted. The hypalgesia over the medial anterior thigh was thought to be a conversion phenomenon. The possibility of venous damage was mentioned. Dr. A noted psychophysiologic stress reaction, overall poor functioning, and depression. The gross differences between the patient's complaints and the findings of the physicians (as to extent and duration of time) were also delineated in Dr. A's report. The psychological overlay and its effects contrasted with the questionable findings on neurologic examination.

The report of Dr. G, a urologist, on 22 April 1975, dealt with the patient's impotence since his injury and contained a guarded prognosis.

Clinical Report (27 May 1975)

Mr. X, who is now 51, was 49 at the time of the accident on 15 Oct. 1973. He had been a licensed real estate salesman since 1961 or 1962 and had his own business since 1970. On that evening he had an appointment to show a large commercial property to a prospective buyer. He discussed the details of that evening thoroughly; to summarize, he went through the building with the prospective buyer and the buyer's accountant. The three of them passed through an exit door on the second floor onto an unlit landing. Apparently there was a gap in the floor about three or four feet (about 1 or 1¼ m) square with a ladder against the wall (for purposes of fire escape). As they turned, he fell through the opening with his right leg going down through the hole and his left leg thrust up the landing, with the result that his crotch area took the impact of the fall. He stated, "I screamed—I thought it was the end, that I was severed in half. I felt ripped up the middle... I undoubtedly grabbed or grasped something. They pulled me out of it. My breath was knocked out. I was screaming in pain." He thinks that the platform was a steel platform or steel grid. He states that the other two men pulled him up and laid him down, that they pulled him into the hallway. He indicated that his pants were saturated with blood, with "blood pouring from the orifice," and that his underwear and trousers were soaked with blood. His wife drove him to the hospital. He was told to see his own physician if bleeding persisted. He states that his testicles and penis were "charcoal black" for four months. He described his visits to various doctors including a Dr. H who told him that he had a stricture. He stated that he had trouble in urinating subsequently and that bleeding in the urine continued until March in a variable fashion—sometimes red, sometimes pink. He indicated that he had had a cast on his left leg for 1½ months and a steel brace since, because his left leg still gave out.

His main complaint now is his impotence and his total inability even to obtain an erection. For the first few months, because of the "excruciating pain," sexual activity was the "last thing" on his mind. Starting in March, 1974 he and his wife made many attempts to have sexual relations. He indicated that he still has pain, that he feels a soreness in the right testicle, and he wears a support or jock, even in bed. He has not had a erection since the accident. He has not had nocturnal erections or "wet dreams." He has not even had a partial erection and feels that his penis is shrunken. He felt that he had had good sex relations with his wife, that his wife is quite attractive, that he has tried everything. Prior to the accident, they had relations about once or twice a week; he now has no response to any type of stimulation.

He had some pain on urination for 6 to 7 months and still feels that he presses harder to urinate. He was quite upset, as was his wife who became extremely agitated when Dr. G indicated to him and his wife that his condition might be permanent. He feels that he is no longer a man and feels despondent and depressed.

In discussing their prior sex life, he indicated that his wife was receptive and responsive and that neither had any problem with a climax. He feels that this situation is most difficult for his wife.

Mr. X was born in 1932 and raised in northern New Jersey, where he graduated from high school. He did not serve in the military because of a heart murmur. His father was of Lithuanian background; his mother, German; and their religion, Catholic. He father died at 69 in 1958 of cancer of the lung. His father was a railroad engineer (diesel and steam) with little schooling. His father came to this country after his school years in Europe. He described his father positively, as having a sense of humor, as learning to play several musical instruments by himself. His mother died at an early age in about 1931 or 1932, when he was 8 or 9, of lobar pneumonia. She was 29 or 30. He vaguely recalls her as a kind, pleasant, warm woman. His father never remarried, grieved for 2 to 3 years, and raised his two children, the patient and his older brother who helped with the house and cooking. Mr. X was religious and had been a choir boy. He attended the public schools, liked swimming, and was on the soccer team. Mr. X has not seen his brother for several years and does not know where he is; he made reference to improper behavior on the part of his brother but did not specify any details.

In the past he has had little health difficulty. At about age 6 or 7, he had his tonsils removed. About 1959 or 1960 he had an auto accident, hitting his head on a windshield, and was hospitalized for a few days. He reports that he had a scalp cut, no fracture, and no sequellae. In the early 1960s he had a brief episode of chest pain, was given six vasodilator pills which were used over a few weeks, and had no difficulty since. He has had two auto accidents, the one in 1959 or 1960 and another in 1962 or 1963 when his car was back-ended. There were legal settlements in both cases.

He dated from his mid-teens and had periodic sexual experiences prior to marriage. He offers a conventional, moralistic, controlled attitude towards sex. No particular abnormalities or behavior concerns were reported. He married in 1951 when he was 27. His wife was going on 19. It was "love at first sight." He described her in very positive terms, that he liked everything about her—personality, dress, attractiveness, and so forth. She worked in a bank but had done modeling. He indicated that they both had wanted children and that they now have a family of five: boys of 23, 21, and 17 and girls of 17 and 14. All still live at home. The older ones are either working or at school. His wife had no difficulties with the pregnancies or care of the children.

Mr. X worked for many years as a car salesman. In his twenties, he owned a taxicab fleet of 7 or 8 cabs but this failed because he was "too lenient." From about 1948 or 1949 he was a salesman for Hudsons and later for Buicks. He later was a luxury car salesman and for several years had a special arrangement for the direct sale of these cars from an office in New York on a commission basis. In the early 1960s he became a licensed real estate salesman, selling mostly residential buildings. Overall he had a gradually increasing income over the years. He indicated that he had had financial problems last year and had taken two personal loans and a second mortgage.

He has had vitiligo (a depigmentation of the skin) for several years, and it is slowly spreading. He smokes about half a pack of cigarettes a day, has no allergies, and does little drinking. He feels that he never felt that he was an emotional person in the past, that he was always optimistic, and that he had no financial problems prior to his accident.

Mrs. X was also interviewed at length. She was a cooperative, straightforward person who spoke about what had occurred and how their life had changed. Her account was quite similar to that of her husband. She indicated that at the time of the accident she had been waiting in the car when she heard a cry. When she saw her husband at the building, he was bleeding profusely and in great pain. She described the discoloring, secondary to the bleeding and swelling, which turned black the following day. She indicated that at times his urine was pink and that it was red after cystoscopy. She indicated that because of the severe pain, attempts at sex were "unthinkable." At later points, when they would try, "absolutely nothing" would happen. She indicated that she was quite upset, as was her husband. "For him, it's one failure on top of another.... I feel so sorry; it's tearing

him apart.... I tell him it doesn't matter. I try anything I can. I miss the close relationship intercourse does offer."

She indicated that he has been quite despondent, that for a while she was afraid to leave him alone, and that he is now quite irritable at times. At times he does not talk and has a look of sadness. She was fearful that he might attempt suicide. On one occasion three or four months ago, he stated, "I feel like blowing my brains out." He has not had crying spells. Things have improved somewhat in their real estate business and they have sold a few houses. In the business, he had been the aggressive sales personality while she described herself as quiet and not too persuasive. She drives him around. They are now in a multiple listing service. They occasionally go out to dinner or have friends over. They drink little.

He used to "fool around with cars, collect guns and coins, and refinish furniture." In the past, he was aggressive, "get-up-and-go," optimistic; now he is pessimistic. He still is somewhat aggressive, "like he's pushing himself." He used to be quite patient and now is irritated over little things. His appetite is very good but he sleeps poorly and is restless. She hears him moan at night. He will awaken at night and have trouble getting back to sleep; she will hear him in the kitchen at 2 or 3 a.m.

She described their previous sex life as good, with mutual enjoyment and no problems. She also indicated that all their relations were good: "we've always been very close." They used to have satisfactory sex relations about twice a week until the accident. "Sex, if anything, was more enjoyable the older we got.... It was a beautiful experience. It's hard to believe it could stop just like that."

He used to like to work with wood and paneling. He walks with a brace. When the brace is off, his leg may give way. She indicated that an operation has been recommended. He was always high-strung, full of energy, and going all the time. They always lived well and particularly enjoyed trips to the Bahamas. She indicated that he had been in good health except for an episode of choking sensation in 1959, which was called coronary insufficiency, and again briefly two years later. He had had electrocardiograms at that time and took medication briefly. He was not one to complain about his health.

Prior to the accident he never had an episode where he was unable to perform sexually, and their sexual pattern had been consistent and stable for many years.

Mr. X is a tall, good-looking man who moved awkwardly, holding his left leg somewhat stiffly. He was quite tense and under some pressure of speech. At times he would be effuse and friendly, almost ingratiating; at times he related almost in a pleading fashion, wanting something to be done with a sense of immediacy. He also called a few times during the evaluation procedure in order that therapy could be begun (though this was never specifically offered in that he was told that the first step was an evaluation of the situation). He showed some agitation and pressure of speech and focused on his disabilities. No gross deviation of thought, hallucinations, delusions, memory lapses, or other conditions were noted. He is of average intelligence, made some errors on simple arithmetic, and has a limited fund of knowledge. His use of abstract thinking was well within normal limits as demonstrated in the interpretation of proverbs. He is rather conventional, restricted, unimaginative person who shows some limitations in judgment. His use of language was in keeping with the above findings. At times he was able to demonstrate a sense of humor. His palms were extremely moist, reflecting his anxiety during the interviews. He relates quite intensely, and one can readily imagine that physicians would react to the intensity of his needs and demands as well as expressions of concern.

His test drawings were well performed with no indication of organic brain disease. His drawings of people showed no unusual features with good perception and even some artistic ability, with perhaps some anxiety reflected in the use of lines. The MMPI was compatible with the clinical picture. This is in contrast to the probably outgoing, confident, overactive, optimistic salesman personality which apparently is characteristic of his previous

functioning. He has an intense need to appear in a good light, to show social conformity, to deny even minimal shortcomings. The picture was that of a naive person with insecurity who is somewhat rigid and stereotyped in his responses. To some extent, this may be affected by the circumstances of examination. Concern with physical symptoms was reflected. The picture reflected current depression; "he views himself as unhappy and useless. Apathy, lack of interest, pessimism and worry may be expressed." The MMPI pattern was compatible with the use of neurotic defenses to control anxiety.

There were only nine responses on projective testing. He displayed a constriction of thought and imagination but several of the responses were appropriate percepts. Three of the responses reflected his physical preoccupations. One card represented his penis with the shadows emanating from it representing his pain. One card with variable color reminded him of blood coming out of him, his intravenous pyelograms, and his bleeding. And another highly stimulating card reminded him only of his limp penis.

Thus the picture is that of marked personality change in a man who was probably reasonably well adjusted without a history of excessive somatic preoccupation. He was an outgoing, highly energetic, outward-directed individual with little introspection or intellectualization. He now shows persistent anxiety and depression consequent to his injury, decreased mobility, and impotence. His sense of optimism and self-esteem has been severely affected. The picture of anxiety, reactive depression, and marked somatic preoccupation is essentially that of a severe posttraumatic neurotic syndrome. He now views himself as damaged, with a loss of masculinity and competence.

It would seem to me that a good part of his reaction which has been manifest to his medical examiners reflects a psychological reaction to what has happened rather than being cause of his primary complaint, his total impotence.

Review of the Subject of Impotence

The following review has also been taken from the clinical report of 27 May 1975.

The subject of impotence and sexual incapacity is a very difficult and complex one, both because of the number of variables that may contribute to such a disability and because of the limitations of scientific knowledge. For example, central nervous system disease may affect potency. Thus, spinal cord damage in the S-2 to S-4 level either from trauma or other nerve damage may cause impotence. An example of the latter is diabetic neuropathy, for which there is no known treatment. Dr. A's examination would reasonably preclude nerve damage at this level.

Physiologically there are involved in erection, ejaculation, and emission the blood supply from the paired dorsal and deep arteries from the internal pudendal artery, the venous system, the parasympathetic nerve outflow from S-2-3-4 (nervi erigentes), the sympathetic nerves, the contraction of the bulbocavernosus and ischiocavernosus muscles, the epididymis, vas deferens, and prostate reflex (through the lumbar sympathetic nerves and the hypogastric plexus). Some of the organic causes affecting the system are diabetes, tabes, multiple sclerosis, trauma, drugs, toxic chemicals, alcohol, hormone abnormality, deficiency in blood supply (Leriche syndrome), and prostatic surgical procedures. The Leriche syndrome is an obstruction of the arterial supply from the aorta and proximal iliac arteries.

Several of the causes are due to nervous system disease, which is not present here. What is of interest is the problem of impotence resulting from injury in the area of the urethra and prostate—local injury in which gross neurological examination will be normal. One type of problem involves erection and ejaculation after prostate surgery in which there is internal reflex damage and ejaculation backwards into the bladder. The more serious problem is sexual inability to perform.

A narrow area of deliberate damage to internal structure occurs with surgery with pro-

static disease. There is significant diminution in potency or impotence after a transurethral resection. This is more common after a suprapubic resection of the prostate; only 50% of these cases have satisfactory erection and intercourse after surgery, albeit with retrograde ejaculation. The incidence of impotence after radical perineal prostatectomy is about two thirds. Impotence has occurred even after biopsy using this approach.

There are two basic types of local trauma involving damage to the urethra. One occurs where there is a shearing of the urethra above the urogenital diaphragm or within the abdomen, usually after a pelvic fracture such as is most commonly seen in automobile injuries. Here there is about a one-third incidence of impotence, thought by some to be due to local nerve damage, by others to vascular damage. Extrapelvic rupture or urethra damage (to the anterior urethra) has a lesser incidence of impotence. This is most likely seen after a straddle injury, as was the case here (otherwise known as a "fall astride" injury). Damage to the urethra may be a complete or partial tear, with impotence more frequent in the former. Symptoms are pain, swelling, and bleeding. Gibson [*4*] states that "though the cause of impotence after urethral injury is unknown, it seems likely that interference with neurological control is indicated. Damage with thromboses of the dorsal and deep arteries of the penis in the region of the perineal membrane may also be involved."

Others refer only to damage to the vascular system. In a series by Gibson [5] of 35 cases of ruptured urethra, 13 were impotent, 6 completely. Five of the 35 had incomplete tears. Mitchell [*6*], in his article on injuries to the urethra, reports on early complications of infection and late complications of stricture, impotence, and incontinence. Inasmuch as these cases involve injury and litigation, various authors note the psychologic aspects of the legal process and report impotence until a case is settled. Obviously such cases are difficult to evaluate where there are no ordinary clinical tests to refer to but where the results are functional. Another observation has been that the older the patient, the more likely is complete impotence. Gibson [*5*] reported a rate of impotence of 37% with ruptured urethra, with a return of potency in 21% (in his series, there was return of potency up to 19 months following injury). Chambers and Balfour [*7*] reported one case of return of erection after four years. Moulonguet [*8*] reported an 80% rate of impotence in cases of ruptured urethra. While rupture of the urethra was not demonstrated here, the severe local trauma could have resulted in the vascular damage theoretically implicated. Chambers and Balfour [*7*] reported 31 cases of fractured pelvis and urinary tract injury, including 19 cases having rupture of the urethra, with a rate of 42% impotence. The average age in this series was 29. In a group of eight patients with permanent loss, six had complete rupture and two had incomplete rupture; here the average age was 36. Impotence was three times more common with complete rupture as compared to partial rupture.

In psychological impotence, one is more likely to find fluctuations in function: a selective impotence related to circumstances, fatigue, alcohol, partners, concurrent psychiatric problems such as depression, and periodicity. Where there is impotence or lack of erection under all circumstances, including sleep, one would be more likely to think of organic deficit.

Thus, despite the psychologic overlay described earlier and the posttraumatic depression with anxiety, it would seem that the most likely cause of the total impotence would be physical trauma. If this is the case, then psychotherapy obviously will be of no assistance in this regard, although it may help in dealing with the adjustment problems and the traumatic neurosis.

I might add that the history seems reasonably consistent, and Mrs. X seems to be a reliable, concerned informant. Another possibility for testing is the use of a penile measuring device, either with direct sexual stimulation or during sleep, to see if an individual is capable of erection; this is normally the case with certain electroencephalographic patterns during sleep.

While a trial of antidepressants would not be unreasonable, they are most effective with

endogenous or biologic depression and of limited value in reactive depression. A potential benefit of psychotherapy is that it may further aid to clarify the role of the emotional factors in addition to helping Mr. X adjust to the situation. Nonetheless, it may well be, considering the passage of 19 months, that the outlook is not promising for the impotence problem.

To summarize, my opinion is that the traumatically induced impotence has been followed by a neurotic reaction characterized by anxiety and depression.

Further Data and Discussion

Subsequent to this evaluation, Mr. X was seen by two psychiatrists on behalf of the defendant. In addition, he was referred for impotence evaluation to a specialized laboratory in New York where penile plethysmography and electroencephalographic records were obtained over four nights.

Dr. I, a psychiatrist, submitted a report (22 July 1975) to the defense attorneys based on his analysis of the report of 27 May 1975, without examining Mr. X. He belittled the report, noted that his wife drove Mr. X around despite Mr. X's "relatively minor, if any, physical sequellae," and wondered why. He focused on the patient's financial problems with the implication that they predated the injury, although the history would indicate that the financial difficulties arose after the injury (it was more than 1½ years before he was seen for evaluation at Rutgers). He made much of the brief episode of hospitalization in 1959 despite the many years of good functioning and relatively little medical care during this period. Dr. I described some of the information as "contradictory," while at the same time he categorized the history given by the patient and his wife as "self-serving." Dr. I felt that the report of 27 May 1975 included contradictions both by the informants and in the appraiser's evaluation. Dr. I also stated that there was no clear-cut indication of any permanent physical trauma which should cause impotence and that this was confirmed by the summary of the literature included in the 27 May 1975 report. He further concluded that there was substantial evidence of personality and financial problems prior to the accident and that these were not considered sufficiently in considering the causation of the depressive neurotic reaction that Mr. X had been battling for many years, again quoting Mrs. X's statement "that it is one failure on top of another." In my own subsequent response to the attorney (10 Feb. 1976), I pointed out the lack of prior significant functional disability, the apparent misunderstanding about the financial crunch which arose after injury, and that the reviewer did seemingly accept the findings described as to anxiety and depression but focused on them as preexisting difficulties. I also pointed out that the "contradictions" were hardly self-serving and that my suggestion to check out further possible organic elements was most appropriate. Dr. I did not testify at the subsequent trial.

Dr. J, a psychiatrist, reviewed the medical data and did examine Mr. X on behalf of the defendants (report of 15 Nov. 1975). He performed both a psychiatric and neurologic examination. The neurologic findings were negative. Dr. J did note a limp, some tremulousness of the fingers, sweating of the palms and feet, and no abnormal sensory complaints. He concluded that there was no "permanent disability in the neurologic or psychiatric area" but acknowledged a "pattern of some hysteria, ... which based upon the history presented would have to be attributed to the accident in question." He noted that the patient had pursued essentially only the organic aspects, while he felt that a psychiatric approach had a better prognosis.

In the intervening period, much effort was expended in attempting to convince Mr. X to submit to further testing to clarify possible organic elements in his disability. He was particularly resistive to plethysmography. One alternative was providing sexually stimulating materials such as movies while simultaneously recording changes, if any, in penile circum-

ference. The second (and considered more appropriate) was to conduct sleep studies with continual electroencephalographic and penile plethysmographic (mercury strain gauge) recording to ascertain the degree of nocturnal erection in association with sleep. This testing was accomplished at the Sleep Laboratory (Charles Fisher, M.D.) of Mt. Sinai Hospital in December, 1975 and January, 1976. Mr. X was noted to have symptoms of a severe, chronic posttraumatic neurosis with sweating of the hands, trembling, anxiety, hypochondriacal preoccupation, impotence, pain in the right testicle, and sleep difficulties. The details of the findings have been described by Rosen [2]. The diagnostic conclusion was posttraumatic neurosis with sexual impotence of psychogenic origin. There was marked difficulty in sleeping, with four erections in four nights, including one of maximum magnitude, two during rapid eye movement (REM) sleep, and two during other periods of sleep. One would have expected marked impairment in the ability to have any nocturnal erection had there been concurrent organic difficulty. His impotence was felt to be of extreme degree, as disabling as severe organic deficit; prognosis was guarded.

Follow-Up

Mr. X's personal injury suit went to trial in April, 1976, at which time he won a substantial verdict. Two areas of therapy were suggested to Mr. X: (1) psychoanalytic or other psychotherapeutic approaches or (2) sexual behavioral therapy. To this date, he has declined both. It was felt that he would be a difficult patient because of his immaturity, demanding attitude, wish for prompt cure, poorly controlled anger in dealing with physicians, and lack of insight or psychological sophistication. One suggested goal of treatment was to help him in dealing with his deficit as well as the deficit itself. His condition apparently has continued without change since the trial, and a report from the attorney in January, 1977 indicates a continuing total functional impotence without erection under any circumstances, waking and sleeping. Similarly his overall psychological state continues unchanged. In view of the passage of 3½ years without any improvement and the period of time since conclusion of the litigation, prognosis as to his impotence would be considered quite poor.

Summary

The evolution of a case of traumatic impotence has been presented in detail with review of prior examinations, clinical evaluation, discussion of the elements to be considered, and the use of current procedures to clarify the diagnostic process. In the treatment of impotence, as well as in other numerous conditions, diagnostic clarity, if possible, is necessary both for prognosis and choice of treatment. Obviously, in the case of fixed organic impairment psychological modalities may be meaningless in the treatment of the symptoms stemming directly from that deficit. Psychotherapeutic approaches may be helpful in dealing with the emotional reaction to the underlying organic disease, but the extent of the latter should be known.

Evaluation is compounded by the limitations inherent in each narrow specialty approach. In this case neurologic, orthopedic, urologic, and psychiatric appraisals were all pertinent. As the literature and clinical experience show, clinical evaluation of impotence is often difficult. Those specialties based on organic medicine focus on physical deficit using the means and techniques of the specialty. If findings are negative, the patient is considered to be faking or self-serving, hysteric, or in a posttraumatic neurotic state, depending on the presenting picture and the examiner's attitude. Impotence is a problem in which ordinary physical (or neurological) or laboratory work-up contributes little. The symptoms of impotence are functional and of limited testability. Accurate history is essential and is the most pertinent source of information. In a litigation-conscious society,

patient history is suspect; therefore, any means that can clarify the picture are most appreciated by the clinician and others.

The problem is compounded by the mixture of secondary gain, aggravation of personality typology, and the possible mixture of both organic and psychologic factors. The use of a relatively new tool, penile plethysmography (or the use of the mercury strain gauge), in association with electroencephalic and sleep studies is most appropriate in clarifying the issue of organic as opposed to emotional deficit. The patient's mode of behavior during such testing is also of assistance in clarifying diagnosis.

In the case of Mr. X, the findings strongly support posttraumatic neurotic symptoms, not necessarily precluding the possibility of an organic element or partial physical deficit in combination with engrafted emotional symptoms. Furthermore, this study, done almost 2½ years after the injury, does not preclude the possibility that Mr. X had an organic impotence of great degree which gradually resolved either completely or in part with the passage of time. Had such testing procedures been available, it is possible that periodic study might have shown a changing picture. One can speculate that the handling of the patient might be easier if one could show the extent of organicity and the change over time before psychologic reaction patterns become relatively fixed. From the medicolegal standpoint, this case reflects the extensive effort that often must go into diagnostic appraisal, the preparation of such a case by lawyer, physician, and others, and the use of new techniques which become adaptable to clinical and medicolegal evaluation.

References

[1] Perr, I. N., "Psychiatric Testimony and the Rashomon Phenomenon," *Bulletin of the American Academy of Psychiatry and the Law*, Vol. 3, 1975, pp. 83–98.

[2] Rosen, R. C., "The Use of Penile Plethysmography in Medicolegal Evaluation," *Journal of Forensic Sciences*, Vol. 22, No. 4, Oct. 1977, pp. 791–794.

[3] Broderick, E. F., Jr., "The Legal Preparation of a Case of Traumatic Impotence," *Journal of Forensic Sciences*, Vol. 22, No. 4, Oct. 1977, pp. 795–798.

[4] Gibson, G. R., "Impotence Following Fractured Pelvis and Ruptured Uretha. I.," *British Journal of Urology*, Vol. 41, Oct. 1969, p. 602.

[5] Gibson, G. R., "Impotence Following Fractured Pelvis and Ruptured Uretha. II.," *British Journal of Urology*, Vol. 42, Feb. 1970, pp. 86–88.

[6] Mitchell, J. P., "Injuries to the Uretha," *British Journal of Urology*, Vol. 40, Dec. 1968, pp. 649–670.

[7] Chambers, H. L. and Balfour, J., "The Incidence of Impotence Following Pelvic Fracture with Associated Urinary Tract Injury," *Journal of Urology*, Vol. 89, May 1963, pp. 702–703.

[8] Moulonguet, A., "Ruptures Traumatiques de l'Urethre Posterieur," *Journal d'Urologie et de Nephrologie*, Vol. 71, 1965, pp. 1–96 (referenced in Ref 5 above, p. 87).

Rutgers Medical School
College of Medicine and Dentistry of New Jersey
Piscataway, N.J. 08854