## Family Practice Grand Rounds

## Chronic Invalidism in a Young Woman: A Study of Family Dynamics

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DR. HERBERT L. TINDALL (Associate Director, Family Practice Residency Program): Today's case illustrates some of the devastating effects of chronic invalidism upon family dynamics. The main character in our drama is a 33-year-old housewife and mother. The stage will be set by Dr. William Shoemaker, whose perception and persistence led to the unraveling of a somewhat baffling problem.

DR. WILLIAM SHOEMAKER (third-year family practice resident): I first became acquainted with our index patient when she accompanied her mother to the Family Practice Center. The story, therefore, must begin in February 1975, when the patient's mother, a 55-year-old white woman, presented to the Center with multiple complaints including chest pain, hot flashes, and an itching vaginal discharge. Accompanying the chest pain at times was abdominal pain, back pain, and shortness of breath. Her last menstrual period was four years previously. She took hormones for about one year, but stopped one year prior to this consultation. She stated that she had been very depressed and withdrawn in the past several months and experienced severe anxiety. She had a problem getting to sleep, and she awakened many times during the night. She related a series of misfortunes in the past year. Her husband ran away. Her daughter, our index patient, is incapacitated by severe kidney disease and depression. Two grandchildren, the children of the invalid daughter, were sexually molested. She said that she had lost interest in life, and frequently felt worthless and hopeless.

A complete physical examination was essentially normal with the exception of senile vaginal changes with a thin, atrophic vaginal mucosa. The discharge appeared to be normal. The urinalysis was normal and the smear of the vaginal discharge did not reveal any pathogens.

The diagnosis was depression and

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menopausal syndrome. She was started on an antidepressant and on cyclical estrogen therapy,

In January 1976, 11 months after her first visit to the Center, the mother was admitted for one week to the Lancaster General Hospital with an acute pyloric channel ulcer, anxiety, and depression. Noted in the hospital record was a long history of "bad nerves." She also stated that she had frequent bladder and kidney infections, and that one daughter has polycystic kidneys. On February 9, she reported to the Center for a posthospital check for her ulcer disease. She appeared less tense than previously and stated that she had improved, had little pain, and was taking her medications regularly.

At this time, I had a long discussion with her regarding her daughter's disease and its effect upon the family. It seems that all family members related to the daughter as an invalid who was bedridden, and terminally ill with renal disease. She had become a very passive, dependent person and was accustomed to staying in bed for long periods of time and being waited upon by her husband and by her mother. Both her husband and her mother had wanted her to see a nephrologist, but she had been content to stay with the general physician who had been treating her.

The daughter was seen at the Family Practice Center for the first time in February 1976, a year after her mother's first visit. She was an overweight 33-year-old white woman, height 621/2 inches, weight 1931/4 pounds. Blood pressure was 134/90. She said that she had chronic nephritis and polycystic kidneys. Recent medical care had been by her general physician. Two weeks previously she had been told that she had a kidney infection, and was now taking nitrofurantoin (Macrodantin), as well as an analgesic (Percodan). She had pain in the left flank with heavy aching in this area. She complained of some burning on urination, which was intermittent.

She stated that she had been studied for this kidney problem at two Philadelphia medical centers and two community hospitals in this area. She understood that the right kidney was not working, and that the left kidney had minimal function. She complained of 2x nocturia.

Examination by the physician who saw her at that time revealed left costovertebral angle tenderness with large, palpable kidneys bilaterally, both of which were tender. His impression was polycystic kidney disease, and he was also concerned about possible drug dependence. He switched temporarily to another analgesic. He postponed an immediate renal consultation because the renologist was on vacation, but planned to have the renologist's alternate see her the next day if the pain persisted. At the time of this visit the urinalysis was normal.

Two weeks later, I received a phone call that the patient was having pain, ankle and face swelling, and tiredness. By now, she had decided that she would like to see a renologist. I set up an appointment for Dr. Schubert to see her in his office a week later. I was suspicious from her history that her symptoms might be due to renal failure. However, two days later, the patient's husband called an ambulance because she was having severe pain, and she was taken to the Lancaster General Hospital and admitted. The impression of the examining physician in the Emergency Room was that she had left flank pain and colic probably due to bleeding into a polycystic kidney, or possibly from pyelonephritis. She was admitted to the service of Dr. John Schubert, whom we will ask to comment on his initial evaluation of this patient.

DR. JOHN SCHUBERT (Renologist): I found the history to be inconsistent and wondered if it might not be partly fictitious. Frankly, my initial concern was to exclude drug addiction. Her pain was in the correct distribution for renal colic radiating around to the groin, but each pain only lasted a second. Her history was one of multiple admissions, to a number of hospitals, for treatment of urinary tract infections in a patient with a "large, cystic left kidney and a nonfunctioning right kidney." Physical examination was negative except for some subjective tenderness over the left side of the abdomen. No enlarged kidney or mass was palpable. The diagnosis of polycystic kidneys for renal failure therefore seemed doubtful. An intravenous pyelogram was ordered, and old records were requested. The intravenous pyelogram was performed on March 2, 1976, and Dr. Hoke will discuss those films.

DR. HUGH H. HOKE, JR. (Radiologist): A preliminary scout film of the abdomen demonstrates a right renal shadow that measures only 4 to 5 cm in length. Following the infusion, the contrast serial films were obtained. There is an equal appearance of the contrast, bilaterally. The right kidney is small and deformed with deformed calyces and significant loss in cortex. The kidney measures 2 x 4 cm in greatest diameter. The left kidney is of normal size; however, the contour is unusual. There is loss of cortex in the medial aspect of the upper pole. The calyces are all blunted. There is either a large scar or post-surgical change involving the inferior half of the left kidney laterally. No evidence of polycystic disease is present. The changes are most consistent with an atrophic right kidney, secondary to chronic pyelonephritis. There are also changes of chronic pyelonephritis involving the left kidney, however, not to the same extent. There is no evidence of obstruction. The bladder is normal. My impression is that there is an atrophic pyelonephritic right kidney and changes of pyelonephritis in the left kidney. Even though this patient's history is one of polycystic disease, there is no evidence of this disorder on these films.

DR. SCHUBERT: The right kidney looks like a miniature, normal kidney to me, and I believe it represents a congenital hypotrophic kidney. There is definitely scarring in the left kidney which probably represents damage from old infections. She has at least 50 percent of normal function. I strongly advised her that her pain was not coming from her kidneys, that she did not have end-stage renal disease, and that there was no reason for her to be incapacitated by her old kidney problem. The next day she complained of a heavy band of pain around the waist, as well as left lower quadrant and suprapubic pain. On examination there was some left lower quadrant tenderness with guarding. However, she also complained when I pinched her skin lightly in various parts of her body. In conclusion, I felt her symptoms were primarily psychoneurotic in origin.

DR. SHOEMAKER: The creatinine clearance proved to be 75 ml per minute. The urine culture was negative; however, the patient was taking Macrodantin. A test for porphyria was

negative.

In the meantime, a copy of the summary from the University of Pennsylvania was received. The report, from 1962, described the kidney situation much as it is at the present; thus, there had been no significant change in the renal findings in 14 years. The patient was so advised. This information obviously came as quite a shock to a person who had been told she was dying from kidney disease, I think that she does understand and has accepted the possibility that she is not mortally ill. At this time she was discharged from the hospital on 2 mg of trifluoperazine (Stelazine) b.i.d., and advised to begin an exercise program and increase her activity.

Following the patient's discharge from the hospital, her mother came into the office. She had many different problems relating to her daughter and herself, and we had a 90minute discussion about these. Since receiving the information that the daughter is basically not sick, all the family structures have been severely stressed and everyone is quite shaken and upset. The daughter accompanied the mother to the Center at this time. The daughter had increased her activity at home, as Dr. Schubert had told her to do. She was trying to avoid dwelling upon her problems. Her husband, having become used to relating to her as an invalid, had become quite upset and still felt that she should be acting like a terminally-ill patient. Her mother stated that she now felt "useless" and the patient had decided that she "would not need to see any doctors now." However, another circumstance came to the rescue, at least temporarily. The patient's grandmother had become sick in Pittsburgh and the mother was planning to go out there the following week and take care of her sick mother.

On March 17, the patient returned for a post-hospital patient check. She still had back pain. At this time she showed me a slip of paper given to her at one of the Philadelphia medical centers in 1972, in which a physician had stated that she had a "herniated lumbar disc." At this point, I reoriented my thinking, and listened to her new story. The history was classic for a ruptured disc, as was the physical examination. She had fallen while pregnant in 1969. She did not have pain from 1969 to 1972, but has had

chronic pain ever since. The pain is in the low back and hurts when she coughs or sneezes. The pain radiates down the left leg to the left knee, and there has been some weakness in the left leg. On examination, straight leg raising was positive on the left at 70 degrees. It was negative on the right. There was an absent left ankle jerk and a slight response on the right. Knee jerks were positive (1+) and biceps (3+) and equal bilaterally. There was some problem with heel walking and toe walking. Babinskis were absent. The patient was placed on Zactirin Compound for pain, and a neurosurgical consultation was requested. She was seen by Dr. Argires on March 30th.

DR. JAMES ARGIRES (Neurosurgeon): The patient told me that for many years she has had repeated episodes of back pain and that she has polycystic kidneys for which Dr. Schubert has been treating her. Apparently the significance of her renal studies, disproving polycystic kidney disease, had not completely penetrated her thinking. Chronic back pain has been associated with bilateral leg distribution, more specifically on the left and along the L-5 dermatome level. The pain is accentuated and aggravated by physical activity. Lumbar spine x-rays done at another hospital are not available, but there is some question of apophyseal sclerosis, as well as early degenerative disc disease. There is no bladder or bowel disturbance, and no other joint complaint. Efforts to correct her obesity have been unsuccessful. Her prolonged bedrest which was occasioned by her supposed kidney problem did not cause any marked regression in her back symptoms. Physical examination was essentially negative except for the neurological findings which revealed absent bilateral Achilles reflexes and some straight leg raising restriction on the left. There was paraspinal tightness and tenderness and some straightening of her lordotic curve. There was no motor or sensory deficit and there were good peripheral pulses. My impression was that she had lumbar degenerative disc disease, and I suggested admitting her to the hospital for a lumbar myelogram and further decision as to treatment.

DR. SHOEMAKER: The patient was subsequently readmitted to the Lancaster General Hospital on March

31; and a lumbar myelogram showed an acute herniated lumbar disc at the L-4-5 level on the left. She was scheduled for surgery.

It is interesting to note that immediately preoperatively, the husband took me aside and asked if I thought she could withstand the operation since she had such bad kidney disease!

Postoperatively, she made a slow progressive recovery, though she still complained of considerable pain. She was discharged on April 15 on 25 mg of chlordiazepoxide hydrochloride (Librium) q.i.d., and Percodan for pain.

On outpatient follow-up, the patient and family are improving satisfactorily. The patient is now motivated for weight loss, and her affect and mood are quite good. Her husband seems satisfied and is becoming adjusted to relating to his wife as a non-invalid. The patient is using Librium and propoxyphene napsylate with acetominophen (Darvocet) only, with no narcotic medication. Her mother is kept busy and useful in Pittsburgh taking care of her ill mother.

DR. TINDALL: This case is an excellent example of how invalidism of one member of the family can severely affect family dynamics. Dr. Shoemaker is to be congratulated for his excellent work in taking an overall view of this family and in constructively influencing the lives of the immediate family members. Without the family medicine approach, the individual members of this family would probably have gone on for many years seeking fragmented care and acting upon incompletely informed advice. Only when one stood back and took an overall view of the dynamics of this family, was it possible to fit the parts of the puzzle together and to begin to disperse the pathologic mechanisms which were leading all of the family members to disaster. It would appear that Dr. Shoemaker still needs to guide this family through a period of adjustment to their newfound situation. It will be interesting to follow this family and see if new problems crop up to take the place of some which have been solved. In addition, we must remember that the patient does have significant kidney disease, and that some of the problems which have been dispelled at this time may well have to be faced in the future.