

## Valium habit seen among elderly widows

Prescription and use of anti-anxiety drugs has fallen dramatically over the past decade, but there remains a significant number of people who are using such drugs daily for years at a time, according to survey data reported this week by a National Institute of Mental Health researcher. And contrary to popular belief, the chronic users of the so-called benzodiazepines (better known by the best-selling brand name Valium) tend to be elderly widows, many of whom are poor, uneducated and physically disabled.

Speaking at a NIMH conference on benzodiazepines, psychologist Mitchell Balter reported that 15 percent of those who take anti-anxiety medication (or 1.6 percent of the general population) have been taking the drug daily for more than a year, and 6 percent of the users have been taking the drug every day for more than seven years. Surprisingly, Balter reported, seven out of every ten of these habitual users is over 50 years of age and one of three is over 65; most are widowed women, and they tend to be poor and uneducated; many of the users suffer from chronic physical disorders and depression, and one in four is actually disabled. This profile challenges the popular belief that recreational use of Valium is prevalent among the young and affluent.

This pocket of chronic drug use also stands in contrast to a generally conservative national trend in prescribing anti-anxiety medication. According to Balter, the annual volume of prescriptions, which had risen from 45 million in 1964 to over 104 million in 1973, has since declined to the 1968 level of 71 million. In addition, almost half of the prescriptions are now new prescriptions, an indication that doctors are refilling prescriptions less frequently. Whether these trends indicate a change in clinical practice or a public reaction to perceived dangers of Valium abuse is unclear, Balter said.

Balter, who conducted the 1970 and 1979 surveys with psychologist Glen D. Melling of the California-based Institute for Research in Social Behavior, reported that the overall prevalence of anti-anxiety drug use has remained constant at 11 percent—14 percent among women and 8 percent among men. But other than the small group of habitual users, most people use anti-anxiety drugs sparingly: Over 80 percent took a daily pill for less than four months (the recommended limit) and almost half reported taking medication for fewer than three days at a time.

Balter emphasizes that benzodiazepines such as Valium are prescribed for other than psychiatric problems. Although three of four prescriptions are written for treatment of anxiety, 15 percent are prescribed as muscle relaxants and almost 5 percent for treatment of sleep problems. This pattern, Balter says, helps to explain

another finding—that 25 percent of those using anti-anxiety drugs do not suffer from significant psychic distress. It is possible that many of the long-term drug users did not begin using the drugs for anxiety but for physical disorders, Balter suggests, and because these disorders are often

## Shocking treatment for kidney stones

Roughly one in ten American males—and perhaps a quarter as many females—will suffer the excruciatingly painful effects of kidney stones at some time in their lives. Some stones will disappear naturally. But government statistics indicate one out of every 1,000 Americans is hospitalized annually for kidney-stone treatment—in many cases, surgery. Now West German researchers offer an apparently painless alternative. In the March *JOURNAL OF UROLOGY*, Christian Chaussy and colleagues at the Ludwig-Maximilian University of Munich report successful noninvasive destruction of kidney stones using shock waves.

In the procedure (SN: 10/4/80, p. 217), patients in a water bath are subjected to shock waves produced by an underwater high-voltage condenser spark discharge. Each discharge causes an explosive evaporation of surrounding water, which in turn generates shock waves. Spark electrodes are located in the focus of an ellipsoidal reflector. The patient, who has received local anesthesia, is positioned over the ellipsoid so that the stone—monitored with X-ray fluoroscopy—receives the maximum impact from the shock waves.

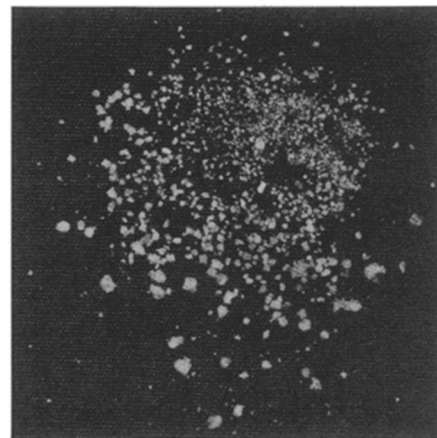
Roughly 800 spark discharges—kept in phase with the patient's heartbeat, via an electrocardiogram monitor, to prevent arrhythmia—are delivered over the span of an hour and a half. Explains Birdwell Finlayson, a University of Florida urological surgeon who has observed the treatment in Munich, the acoustical transmissivity of water and soft body tissue is lower than that of stone, so shock waves pass through them more slowly. As shock waves attempt to exit a stone, they slow up at the soft-tissue interface and bounce back to collide with fresh, oncoming waves. This collision within the stone results in its shattering.

The procedure itself is as painful "as a haircut," Finlayson says. And most patients are distracted throughout the shocking experience by music piped in over headsets.

Following the treatment, patients remain hospitalized for another five days to await the body's natural elimination of the shattered fragments via the urine. Roughly 15 percent will need treatment for severe abdominal cramps, which may accompany passage of larger stone shards

chronic, the patients have had no reason to discontinue the medication.

Balter also emphasizes that the chronic drug users developed the habit of daily drug use at the time when prescriptions for Valium and similar drugs were at their peak. In view of the conservative trend of the last several years, he says, it is unlikely that people are developing such habits today. —W. Herbert



*Kidney-stone fragments—none larger than 2 millimeters in diameter—passed in the urine of a shock-wave treated patient.*

through the ureter (muscular tubes connecting the pelvis of the kidney to the bladder).

Of the 72 patients treated for stones in the renal pelvis during the first year of clinical trials, the researchers report no complications. Two others, whose stones had moved to the ureter, were denied relief because of insufficient stone shattering. Finlayson says that of the 153 patients treated to date, 98 percent have shed their symptoms and roughly 90 percent show total removal of the stone. Stones caused by infection appear most resistant to treatment, probably owing to their density, he notes.

Finlayson cautions American sufferers against rushing off to buy airline tickets for Germany. He says the Munich team is "so overwhelmed by German demand" that all foreigners are being turned away. Meanwhile, Finlayson is in the process of attempting to raise \$2.2 million for the purchase of a sister machine from Dornier System GmbH for the University of Florida's medical research center. While there are no such machines in the U.S. yet, the Food and Drug Administration has tentatively okayed the use of up to six for developing further data on the procedure's safety and efficacy. Washington University in St. Louis may be among the first to receive a machine in the U.S., according to William Fair, a urological surgeon at the university. Fair says one could be shipped to St. Louis by around the end of the year. —J. Raloff

From: Chaussy et al., *The J. of Urology*, Vol. 127, 1982, p. 418