A major shift is under way in the treatment of alcoholism.

Since the disease was first recognized by the medical establishment more than a half century ago, alcoholics seeking treatment have essentially had two options: traditional psychotherapy or abstinence support groups like Alcoholics Anonymous. Although a handful of medications have been available -- including Antabuse, which makes people nauseous when they drink -- they have had limited success and are prescribed to a fraction of patients seeking treatment.

Now, a new wave of drugs is poised to radically change the way doctors approach the disease. Over the past decade, neurobiologists have been decoding the brain's addiction pathways, paving the way for a crop of targeted medications that act on brain receptors to blunt cravings, ease withdrawal symptoms and dull the euphoric effects of alcohol. In one of the most controversial developments, the new drugs may help alcoholics simply cut back their drinking, rather than give up alcohol completely, which some doctors say may be a more realistic goal for many patients.

Some of these next-generation drugs are already available, including acamprosate, an anticraving pill from Forest Laboratories that hit the market in January. Pharmaceutical companies including Pfizer, Bristol-Myers Squibb and Johnson & Johnson's Ortho-McNeil are all exploring compounds to treat alcoholics. A number of studies involve medications already approved for other conditions -- like Ortho-McNeil's epilepsy drug topiramate.

The National Institute on Alcohol Abuse and Alcoholism is running more than 50 trials involving drugs and plant extracts for treating alcoholism. And last month the institute, a division of the National Institutes of Health, issued updated guidelines for treatment, encouraging clinicians to consider drugs in addition to traditional therapies for alcohol-dependent patients.

The potential market for alcoholism drugs is huge. Roughly 17.6 million Americans -- about 8 percent of the adult population -- suffer from alcohol dependence or abuse, according to the NIH. And alcohol-related illness costs the nation an estimated $86 billion a year in lost productivity, according to government data. By shifting treatment into the private realm of a doctor's office, these new
Fighting alcoholism with a pill

Fighting alcoholism with a pill could appeal to people who would otherwise never seek help in a group setting such as AA.

"What it will do is make alcoholism a mainstream problem that family practitioners deal with," says Bankole Johnson, professor of neuroscience and psychiatry at the University of Virginia, who oversees clinical trials on some of the new drugs.

In many ways, the move to treat alcoholism with drugs mirrors the shift in treating depression that came more than a decade ago, when new antidepressants like Prozac hit the market. The drugs helped doctors view depression as a medical problem and treatment expanded to include pills as well as behavioral interventions.

But a blockbuster wonder drug for alcoholism is unlikely in the near future. So far, the drugs don't seem powerful enough to wipe out the desire to drink in all patients. Some have serious side effects, including cognitive problems. And people may have to pay out of pocket, since insurers rarely offer comprehensive coverage for substance-abuse treatments.

The notion that alcoholics could take a pill and maybe continue to drink is a major departure from long-standing approaches like AA's 12-step program, which focus on abstinence. Some worry that the new treatments could lead patients to seek a quick fix for what is more than just a physical condition. In addition, research has been limited so far, and no one knows whether an alcoholic might have to take them for a lifetime.

Nevertheless, the shift toward drugs is gaining steam. Some doctors are already quietly prescribing promising drugs such as topiramate, which is sold under the brand name Topamax. Alcoholics are also finding out about these drugs from Web sites and ordering medications on their own from overseas pharmacies.

Reba Wittenborn, a 52-year-old Portland, Ore., business owner, used to crave a drink the moment she stepped into the parking lot after work. Over a typical evening, she could easily finish off a bottle of wine, plus a beer or maybe a little vodka. Though she could still function in her job, she was tired of feeling groggy and having the cravings rule her life.

Last month, Ms. Wittenborn decided to try topiramate, after reading about a treatment program on the Web site mywayout.org. She says her alcohol cravings vanished the first day she took the drug. That night, she filled her wine glass with ice water instead of wine. Some evenings she still has wine, but finds she can stop after one glass. "It totally took the urge away," she says.

Ms. Wittenborn says she has experienced side effects of topiramate, such as trouble recalling words when talking. But she considers that a fair trade-off. Ortho-McNeil says it is still conducting studies of the drug's use in alcoholics.

Despite the potential size of the market, drug companies have been cautious in exploring addiction drugs, in part because of the liability issues involved. "Alcoholics are in poor health, which increases the chance for adverse reactions," says Henry Kranzler, professor of psychiatry at the University of Connecticut Health Center.

Currently, there are just three treatments approved by the Food and Drug Administration specifically for alcohol dependence. The newest is Forest's...
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acamprosate, sold as Campral. The drug was approved for people who are abstinent, but it may also lessen the severity of relapses in people who resume drinking. Side effects include gastrointestinal problems.

The two other approved drugs include disulfiram, sold as Antabuse, which makes people nauseous when they mix it with alcohol. The Odyssey Pharmaceuticals drug is only marginally effective since few people want to take medicine that makes them ill. Naltrexone, which has been on the market since the early '90s and is sold by Barr Laboratories, works on opioid receptors in the brain to make drinking less appealing. But it appears to work only in a small subset of patients.

Now, several additional treatments could be approved before year's end. Vivitrex, made by the biotech company Alkermes Inc., is a monthly injection of naltrexone. Researchers believe the long-acting form will be more effective, since many alcoholics have trouble taking pills on schedule. And rimonabant from Sanofi-Aventis, which is under review by the FDA for conditions related to smoking and obesity, is also being studied for alcoholism. It works on receptors in the brain and fat cells and may block hunger for a variety of substances, including tobacco, alcohol and food.

With existing therapies, studies show that only about a third of people who seek help for alcoholism are in full remission one year after they start treatment. And clinicians are desperate for anything that might improve patient outcomes. "More people die of their addictions than get sober, so anything that increases results by 10 percent is a godsend," says Robert Forman of the Treatment Research Institute in Philadelphia.

New Research

Some clinical trials under way to test drugs for alcohol dependence:

Rimonabant: An experimental drug that has been shown to help with smoking and obesity, being tested to control cravings in alcoholics.

Ondansetron: Antinausea drug often prescribed for chemo patients, being tested in alcoholics.

Naltrexone: Alcoholism drug being tested in combination with the antidepressant Prozac in depressed alcoholics.

Source: www.clinicaltrials.gov

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Medicine Chest

Some promising drugs are on the market for other uses and are being studied for alcohol problems. A number of clinical trials can be found at www.clinicaltrials.gov.

ON THE MARKET

DRUG (BRAND NAME): Aripiprazole (Abilify)/Bristol-Myers Squibb
DESCRIPTION: An antipsychotic being studied for alcoholics. Works on dopamine system in the brain.
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COMMENT: Also being studied for cocaine addiction.

DRUG (BRAND NAME): Baclofen Generic manufacturers
DESCRIPTION: Approved for muscle spasm. May help alcoholics stay abstinent or cut back.
COMMENT: Main side effects is sedation. Also being studied for cocaine addiction.

DRUG (BRAND NAME): Acamprosate (Campral)/Forest Laboratories
DESCRIPTION: Helps maintain abstinence and lessen relapses.
COMMENT: Treatment involves six pills a day. Drug should be used in combination with therapy.

DRUG (BRAND NAME): Kudzu Over-the-counter
DESCRIPTION: An herb used for centuries to treat binge drinking in China.
COMMENT: Currently available versions may be too weak to have an effect.

DRUG (BRAND NAME): Naltrexone Barr Laboratories
DESCRIPTION: Alcoholism drug that reduces euphoric feelings from drinking.
COMMENT: Some evidence suggests it works better in people with a family history of alcoholism.

DRUG (BRAND NAME): Topiramate (Topamax)/Ortho- McNeil Neurologics
DESCRIPTION: Drug for epilepsy and migraines being studied in alcoholics to reduce cravings.
COMMENT: Side effects include cognitive problems, such as difficulty concentrating or remembering words.

DRUG (BRAND NAME): Ondansetron (Zofran)/GlaxoSmithKline
DESCRIPTION: An antinausea drug. Has been shown to reduce binge drinking and maintain abstinence.
COMMENT: Appears to work mainly in "early-onset" alcoholics who developed problems before age 25.

IN THE PIPELINE

DRUG (BRAND NAME): Rimonabant Sanofi-Aventis
DESCRIPTION: May help with obesity, smoking and alcoholism.
COMMENT: FDA is reviewing drug for cardiovascular problems associated with obesity and smoking.

DRUG (BRAND NAME): Naltrexone (Vivitrex)/Alkermes
DESCRIPTION: A once-a-month injection that may improve patient compliance.
COMMENT: It is currently being reviewed by the FDA, and could be approved as early as this fall.