Dr. John D. Port found significant differences in the parietal white matter of bipolar I patients, compared with other bipolar patients.

**Imaging May Lead To Test for Bipolar**

**By Kate Johnson**

*Montreal Bureau*

CHICAGO — Magnetic resonance spectroscopy can identify distinct abnormalities in the brain chemistry of patients with bipolar disorder, opening up the possibility for a definitive diagnostic test, John D. Port, M.D., said at the annual meeting of the Radiological Society of North America.

“We hope to eventually refine this into a clinically useful test that could shave years off a patient’s time to diagnosis,” said Dr. Port of the department of radiology at the Mayo Clinic in Rochester, Minn.

“The psychiatric community clearly needs a tool to help diagnose bipolar disorder. We hope this technique will prove helpful by identifying metabolic markers of the disease,” he said.

Using a 3T long-bore MR scanner, which has twice the strength of scanners used in previous studies on bipolar disorder, the researchers scanned the brains of 21 patients with a clear diagnosis of bipolar disorder, and 21 healthy volunteers matched for age, sex, and dominant hand.

The bipolar patients were medication naive and free of substance abuse.

Each scan took about 1 hour and enabled the analysis of 14 regions, and five metabolites within the brain tissue, Dr. Port said.

The researchers found that, compared with healthy individuals, bipolar patients had significantly different levels of certain metabolites in two brain areas that control behavior and movement.

In the right frontal white matter, myo-inositol was significantly increased, and in the right lentiform region, N-acetylaspartate, glutamate/glutamine, and creatine were significantly decreased.

Dr. John D. Port found significant differences in the parietal white matter of bipolar I patients, compared with other bipolar patients.

**Intervention’s Benefits Persist in Depressed Elderly**

**By Damian McNamara**

*Miami Bureau*

MARCO ISLAND, Fla. — An intervention significantly increases depression-free days and improves physical functioning in the elderly—even 12 months later, Wayne J. Katon, M.D., reported at the annual meeting of the Academy of Psychosomatic Medicine.

New 2-year data from the Improving Mood—Promoting Access to Collaborative Treatment for Late Life Depression (IMPACT) study show that the clinical benefits of the intervention persist well beyond the initial 1-year treatment period.

“We saw improvements in functioning, pain, and overall quality of life,” said Dr. Katon, a psychiatrist at the University of Washington, Seattle. “We were surprised at the extent of the benefit in year 2, which was equal to the benefit we found in year 1.”

In addition, the intervention proved cost effective at most of the sites. (See sidebar, page 11.) An estimated 10%-20% of older primary care patients meet the criteria for depression, and the percentage increases to up to 25% with chronic illness. But few depressed elderly patients receive appropriate care because of the burden of comorbidities, poor physical function, and often, “an

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**Some U.S.-Born Hispanics At Higher Risk of Disorders**

**By Betsy Bates**

*Los Angeles Bureau*

Mexican-American immigrants to the United States are far less likely than U.S.-born Mexican Americans to suffer from psychiatric disorders, lending credence to the theory that traditional cultural roles and ties to the “old country” are reassuring, protective environmental forces.

A major study drawn from the National Institute on Alcohol Abuse and Alcoholism’s Epidemiologic Survey on Alcohol and Related Conditions raises important questions about the impact of acculturation on the mental health of the nation’s largest ethnic population, as well as other immigrants and their descendants.

“To our knowledge, this study is the first to show that, with few exceptions, foreign-born Mexican Americans and foreign-born non-Hispanic whites were at significantly lower risk of DSM-IV disorders compared with their U.S.-born counterparts,” wrote Bridget F. Grant, Ph.D., chief of the laboratory of biometry and epidemiology at the National Institute on Alcohol Abuse and Alcoholism.

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New IMPACT Data Surprising

Intervention Proves Cost Effective

The IMPACT researchers calculated total outpatient costs as $11,083 in the usual care group, compared with $11,378 in the intervention group. Thus, there is an increase of $295 in the intervention group over 24 months. In year 1, there was $383 more in ambulatory costs for intervention patients, compared with usual care—but in year 2, there was an $88 cost savings associated with the intervention.

For a small bump in cost, you get 93 depression-free days in year 1, and in the second year, you actually save money for the 54 days (gained),” Dr. Katon said.

To ascertain total costs, the researchers considered the cost of usual care as $40 for reference and calculated intervention-specific costs as a mean $591 per patient over the 2 years. Comparing other mean costs for intervention group vs. usual care, antidepressant medication was $416 higher for intervention patients; other medication costs were $126 lower (a net savings); outpatient specialty mental health care was $86 lower; and other outpatient costs were $501 lower for intervention patients.

Intervention-specific costs included psychiatrist and primary care supervision time, nurse time, overhead costs, and educational materials. Other ambulatory medical costs included primary care and specialty visits, emergency department use, urgent care visits, and laboratory and imaging charges. Researchers excluded costs of inpatient care and patient time. The cost of patient time is “difficult to do in the elderly, because most are not working,” Dr. Katon said.

Some figures were estimated. For example, 17%-24% of health care data were not available, Dr. Katon said. In addition, some organizations did not have pharmacy data. In cases where data were missing, imputation—which estimates costs by considering demographics, prior health care use, and other factors—was used to estimate costs.

The researchers estimated the incremental cost per quality-adjusted life year (QALY) for the intervention group. The range was $2,521 to $5,000. “It is widely accepted that anything that is under $10,000 per QALY for health care should be implemented immediately,” Dr. Katon said.

New interventions typically cost more with increased effectiveness, Dr. Katon said. “The holy grail is that an intervention that costs less with increased effectiveness should be implemented immediately.” For three of the eight organizations, the intervention saved money over the 2 years, with greater benefit, he added.

Reimbursement for collaborative care remains an issue. Psychiatrist supervision with the primary care physicians and depression care manager was not reimbursable, nor were the depression care manager’s consultations with other providers (nonpatient treatment time). Follow-up telephone calls, likewise, were not reimbursed.

Despite the reimbursement issues, interest in the IMPACT model has been strong: “We’re getting called all the time from health care organizations all over the United States with questions about how to implement this,” Dr. Katon said.

Visit www.im pact.ucla.edu for more information about the IMPACT study.

Polypharmacy May Be Linked to Depression in the Elderly

BY NORRA M. MACREADY

Las Vegas — Polypharmacy is a strong predictor of depression in an elderly patient, James Cassady, M.D., said in a poster presentation at the annual meeting of the American Geriatrics Society. The Center for Medicare and Medicaid Services (CMS) defines polypharmacy as treatment with nine or more medications. Virtually every review article on the subject lists polypharmacy as a risk factor for depression in the elderly. Few data have been available to support that conclusion, said Dr. Cassady of the department of family medicine at Ohio State University, Columbus.

In a retrospective analysis of more than 875,000 patients in long-term care, 50% of the patients met criteria for polypharmacy, and they had a risk of depression that was nearly twice that of patients receiving fewer medications. Overall, 73% of the patients were taking seven or more medications, so most patients in the analysis were taking a lot of medicine, even if they did not meet the criteria for polypharmacy, Dr. Cassady reported.

The data came from the national Minimum Data Set (MDS), which is administered by the CMS to monitor the well-being of residents in long-term care, based on a comprehensive assessment of each patient on items such as cognitive status, neuromuscular function, stamina, pain, and quality of life. These data were from the MDS for 2002, which included 875,980 patients, about one-quarter of all patients in long-term care in the United States.

Patients were considered depressed if they had an active diagnosis of depression, had taken an antidepressant within the last 7 days, and met criteria for depression as outlined by the MDS depression rating scale. At least one of these criteria was met by 50% of the patients in the analysis.

The risk of depression was significantly increased when patients were taking at least nine medications (odds ratio 1.9).

The analysis also showed that depression was listed as an active diagnosis in 34% of the patients surveyed. Of those individuals, 79% were taking an antidepressant, but only 2% were receiving psychotherapy.

The relationship between depression and polypharmacy appears to be bidirectional: People who are depressed have more somatic complaints than do those who are not depressed, and their doctors may prescribe more medication in an effort to treat those symptoms, which in turn may exacerbate the depression, and so on. Dr. Cassady told this newspaper. But the MDS includes only data reflecting the number of drugs administered in the 7 days prior to their being reported; it was not possible to establish a causal relationship between polypharmacy and depression in this analysis.

New IMPACT Data Surprising

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understanding” that they are depressed because of those comorbidities, said Dr. Katon, professor; vice chair, and director of the division of health services and psychiatric epidemiology at the university.

An initial report on IMPACT—a multicenter study of 1,801 depressed older adults—had shown that 45% of the 906 patients randomized to the intervention group had a 50% or greater improvement in depressive symptoms at 12 months (JAMA 2002;288:2836-45). In contrast, only 19% of the 895 patients randomized to usual care showed the same level of improvement.

The researchers recruited patients from 18 primary care clinics in five states. The participants were 66% female and 24% nonwhite, and all were 60 years or older (mean age 71). Many met criteria for major depression (17%), dysthymia (30%), or both (53%). Participants had a mean of 3.2 chronic illnesses, which included chronic pain, osteoarthritis, incontinence, and diabetes.

‘A lot of these people would not be admitted into other depression studies because of the extent of their comorbidities,” Dr. Katon said.

Participants randomized to the intervention group had access to a dedicated depression care manager. This manager provided education, behavioral activation, support of antidepressant therapy (prescribed by the patients’ primary care physicians), or brief psychotherapy using the Problem Solving Treatment in Primary Care protocol. Depression care managers tracked outcomes using the depression module of the Patient Health Questionnaire (PHQ-9) and adjusted treatment accordingly.

‘Stepped care allowed us to add an antidepressant if needed or to add psychotherapy as needed.”

DR. KATON

The intervention group patients had 107 additional depression-free days, compared with the usual care patients.

‘That is about a one-third-of-a-year difference,” Dr. Katon said: “We’re sorry we did not take this study to a third year, since we saw equal benefit in intervention, compared with usual care patients in the second year.

Of the 107 depression-free days gained by the intervention group, 53 were in the first year, and 54 were in the second.

The John A. Hartford Foundation and the California HealthCare Foundation funded the IMPACT study.