Could Certain Antidepressants Slow Alzheimer’s?

Yvette I. Sheline, MD was the lead author of a new study providing evidence that a drug used to treat depression may also have potential to slow the progression of pre-clinical Alzheimer’s disease (AD), though the results do not yet suggest a direct clinical application. In collaboration with investigators at Washington University and C2N Diagnostics, Dr. Sheline discovered that the common selective serotonin reuptake inhibitor (SSRI) citalopram lowered the production and concentrations of amyloid beta (A-beta), a peptide in the brain that clusters in plaques associated with the development of AD. The paper was published in the May 14, 2014 issue of Science Translational Medicine.

Dr. Sheline stated in a Penn Medicine news release that previous studies by her team “examined a retrospective correlation between the duration of anti-depressant use and amyloid burden shown in PET scans in the brains of elderly volunteers. With this new study we took our research a step further and tested the prospective effect of the SSRI citalopram on the CSF amyloid levels in younger, healthy subjects.” She again found that citalopram had significant amyloid-lowering effects, in a group of 23 healthy human subjects, ages 18 to 50 without medical disease and with no previous history of anti-depressant treatment. The study also demonstrated, in collaboration with Drs. Cirrito and Lee of Washington University, that in an Alzheimer mouse model, SSRI exposure halted the growth of existing amyloid plaques and prevented the development of new plaques in these plaque-bearing mice.

Dr. Sheline emphasized that this research suggesting that the commonly used antidepressant Celexa (citalopram), and perhaps other drugs in its class, may be a weapon against Alzheimer’s disease is still too preliminary to indicate a therapeutic value. “While these results are an excellent start at lowering A-beta production, we are a long way from making a statement regarding the ability of SSRIs to prevent the cognitive decline associated with AD,” Dr. Sheline said. “We are developing a greater understanding of the capabilities of SSRIs, which offer promise for the future as preventive measures, as we continue to uncover the complex mechanisms in the brain that trigger Alzheimer’s and dementia.”

The study was widely covered by many print and electronic media outlets, including HealthDay News, the Associated Press, Yahoo! Health, Voice of America, BBC, The Scientist, NPR, WHYY (Philadelphia) radio, and the Philadelphia Inquirer. Dr. Sheline is Professor of Psychiatry, Radiology and Neurology and Director of the Center for Neuromodulation in Depression and Stress (CNDS) in the Department of Psychiatry.

View the Penn Medicine news release at - http://www.uphs.upenn.edu/news/News_Releases/2014/05/shelin/
Sex-Specific Changes in Cerebral Blood Flow Begin at Puberty

Theodore D. Satterthwaite, MD, MA, Assistant Professor of Psychiatry at Penn, was the lead author of a new study providing evidence that cerebral blood flow (CBF) levels decreased similarly in males and females before puberty, but diverged sharply in puberty, with levels increasing in females while decreasing further in males. Puberty is the defining process of adolescent development, beginning a cascade of changes throughout the body, including the brain. The reported results hint at developing differences in behavior in men and women and sex-specific pre-dispositions to certain psychiatric disorders. The paper was published online on May 27, 2014 in the Proceedings of the National Academy of Science (PNAS).

In a Penn Medicine news release, Dr. Satterthwaite noted the potential importance of the data. “These findings help us understand normal neurodevelopment and could be a step towards creating normal ‘growth charts’ for brain development in kids. These results also show what every parent knows: boys and girls grow differently. This applies to the brain as well,” he said. “Hopefully, one day such growth charts might allow us to identify abnormal brain development much earlier before it leads to major mental illness.”

The study broke new ground, as Dr. Satterthwaite explained. “We know that adult women have higher blood flow than men, but it was not clear when that difference began, so we hypothesized that the gap between women and men would begin in adolescence and coincide with puberty.” The Penn Medicine researchers found support for this hypothesis, based on imaging studies the brains of 922 youth, ages 8 through 22, using arterial spin labeled (ASL) MRI. Of particular note, the difference in CBF levels between males and females was most notable in parts of the brain that are critical for social behaviors and emotion regulation such as the orbitofrontal cortex. The researchers speculated that such differences could be related to females’ well-established superior performance on social cognition tasks. Potentially, these effects could also be related to the higher risk in women for depression and anxiety disorders, and higher risk of flat affect and schizophrenia in men. The study was covered in the electronic and print media by WHYY (Philadelphia) Newsworks, Daily Mail (United Kingdom), Science 2.0, and Der Spiegel (Germany).

Dr. Satterthwaite was joined in the study by other Penn Medicine investigators, including Raquel E. Gur, MD, PhD, Ruben C. Gur, PhD, Daniel H. Wolf, MD, PhD, Ryan D. Hopson, BA, Simon N. Vandrekar, BS, Kosha Ruparel, MSE, Monica E. Calkins, PhD, David R. Roalf, PhD, Efstatios D. Gennatas, MBBS, AICSM, Chad Jackson, MSE, and Karthik Prabhakaran, MS from the Department of Psychiatry; as well as researchers from the Departments of Biostatistics and Epidemiology, Radiology, and Neurology, and from the Center for Applied Genomics at the Children’s Hospital of Philadelphia (CHOP).

Welcome to the Class of 2018

Penn’s Department of Psychiatry welcomes the class of 2018 to the residency training program. The current class of interns in psychiatry was chosen from 826 applicants of whom 108 were actually ranked. These 10 individuals are extremely talented young doctors who were at the top of their medical school classes and who demonstrated a strong commitment to the field, as well as great leadership potential. They began their residency training on June 20, 2014. Next year’s recruitment efforts will begin on September 1 and continue until January 31, 2015. For more information about the Penn Department of Psychiatry’s residency training program, please visit http://www.med.upenn.edu/psych/psychres.html.

Row 1: Behdad Bozorgnia, MD, Lisa Jacobs, MD, MBA, Judith Katz, MD, Daisy Nie, MD
Row 2: Katherine Riva, MD, Eric Rosoff, MD, Elyse Smolcic, MD
Row 3: Sunny Tang, MD, Ashley Un, MD, Bradley Varner, MD

www.med.upenn.edu/psych

Penn Psychiatry Perspective - June 2014
In the News

Penn Department of Psychiatry faculty are highly acclaimed experts in their chosen fields, often contacted by local, national, and international media outlets for their knowledge about topics of immediate interest. In this section, we provide just a brief sample of the many recent interactions that our faculty have with the press. For a more complete listing, please visit Penn Psychiatry In the News - http://www.med.upenn.edu/psych/news.html.

Treatments Offer Hope for Drug Addiction

Anna Rose Childress, PhD was quoted in a May 2-4, 2014 Metro article about her work with the drug baclofen to prevent relapse in cocaine-addicted patients. The Centers for Disease Control and Prevention (CDC) says that more than 100 people die every day from a drug overdose. With these numbers rising, more new treatments and devices are being developed to fight addiction. Baclofen has shown potential at slowing the brain circuitry that gets excited at even the slightest drug cues. “For long-time users," Dr. Childress said, “there are many small things in their environments that can subliminally remind them of their drug use, which eventually becomes a conscious craving. We think this volcanic eruption of craving that comes out of nowhere is triggered by things they [patients] are not even aware of on a conscious level.”

Dr. Childress is Research Professor of Psychology in Psychiatry and Director of the Brain-Behavioral Vulnerabilities Laboratory of the Center for Studies of Addiction in the Department of Psychiatry.

View the May 2-4, 2014 Metro article at - https://pennmedicine.app.box.com/s/9dkjdjg0y42gwnbfjkub

Can Neuroscientists Rewrite Our Traumatic Memories?

Edna B. Foa, PhD was interviewed in a May 19, 2014 New Yorker story about our capacity to recall and handle traumatic memories. Dr. Foa, a world-recognized expert in the treatment of post-traumatic stress disorder (PTSD), offered the following on the subject: “There have always been experts who have maintained that we could help people overcome their trauma-related problems through activating the trauma memory by asking people to deal with this memory. Only in the past decade have researchers determined that, while the original memory may be inhibited, it doesn’t vanish and, therefore, trauma-related problems may not be remitted, even though they are inhibited…” The idea of reactivating traumatic memories, rather than inhibiting them, is consistent with Dr. Foa's theory, called Emotional Processing Theory, which was the basis for the treatment she developed, Prolonged Exposure therapy (PE).

In this treatment, patients are asked to revisit their trauma-related memories, including thoughts, feelings, and situations, in order to process them and thereby reduce their power to cause distress. Dr. Foa is Professor of Clinical Psychology in Psychiatry at Penn and Director of the Center for the Treatment and Study of Anxiety (CTSA) in the Department of Psychiatry.

View the May 19, 2014 New Yorker article at (subscription required) - http://www.newyorker.com/reporting/2014/05/19/140519fa_fact_specter

Insurer Declares Web-based Weight-Loss Program a Success

Thomas A. Wadden, PhD was quoted in a May 23, 2014 Philadelphia Inquirer story about a Web- and video-based weight loss program developed by UnitedHealth Group. Using recordings that can reach large numbers of people is the wave of the future in a country where obesity is at epidemic levels. “I do think this is where weight loss is moving," he said. “It’s moving toward remotely delivered interventions.”

Dr. Wadden said the video-based approach, which is less expensive than standard weight-loss programs, makes sense as a first step for motivated employees. Others may still need one-on-one appointments with nutritionists and other diet experts. Dr. Wadden is the Albert J. Stunkard Professor of Psychiatry at Penn and Director of the Center for Weight and Eating Disorders in the Department of Psychiatry.

Philadelphia Veterans Court Uses Social Services to Support Vets, Lower Recidivism

David W. Oslin, MD was quoted in a May 22, 2014 WHYY (Philadelphia) Newsworks article about Philadelphia’s Veterans Court, designed to keep nonviolent offenders out of prison. The court works because it brings together a team of professionals - social workers, case managers, mentors, peer mentors, attorneys, and therapists - to treat the defendant as a whole person, instead of just looking at the criminal act. The first Veterans Court opened in Buffalo, New York, in 2008. There are now more than 150 across the country. Dr. Oslin, Professor of Psychiatry at Penn and Director of Psychiatric Services at the Philadelphia VA Medical Center, told WHYY, “We use peer mentors in our treatment programs to reach out and engage patients who have dropped out of treatment for one reason or another. Just having somebody that you can meet with briefly and just talk about whether your needs are getting met or other issues that the veterans may not feel comfortable telling their therapist.” Dr. Oslin said that veterans are more comfortable sharing their hardships with someone who understands what they are going through.


Regional, National, and International Honors

Psychiatry Faculty Again Make the “Top Doctors” List
Six (6) Department of Psychiatry physicians were recognized by Philadelphia Magazine as “Top Doctors” in the region, as reported in the May 2014 issue – Kyle M. Kampman, MD (Addiction Psychiatry); Anthony L. Rostain, MD, MA (Child and Adolescent Psychiatry); Joel E. Streim, MD (Geriatric Psychiatry); Steven E. Arnold, MD (Psychiatry; Alzheimer’s Disease); Edward S. Brodkin, MD (Psychiatry); and Michael E. Thase, MD (Psychiatry).

Dr. Sarwer Appointed Public Member Director of the American Board of Plastic Surgery (ABPS)
David B. Sarwer, PhD was appointed a public member Director of the American Board of Plastic Surgery (ABPS), joining 21 other members of the ABPS Board. The ABPS is one of 24 medical specialty boards that make up the American Board of Medical Specialties (ABMS). Its mission “is to promote safe, ethical, efficacious plastic surgery to the public by maintaining high standards for the education, examination, certification, and maintenance of certification of plastic surgeons as specialists and subspecialists.” Dr. Sarwer is Professor of Psychology in Psychiatry and Surgery at Penn. He is a consultant to the Edwin and Fannie Gray Hall Center for Human Appearance at the Hospital of the University of Pennsylvania (HUP), where he leads a program of research on the psychosocial aspects of appearance, and he works with the Division of Plastic Surgery at Children’s Hospital of Philadelphia (CHOP). Dr. Sarwer is also Director of Clinical Services at the Center for Weight and Eating Disorders in the Department of Psychiatry.

Dr. Satterthwaite Receives Klerman Award
Theodore D. Satterthwaite, MD, MA is a recipient of the 2014 Gerald R. Klerman Award. This honor “recognize[s] exceptional clinical and basic research by young scientists who have been supported with NARSAD Young Investigator Grants from the Brain & Behavior Research Foundation.” Dr. Satterthwaite, Assistant Professor of Psychiatry at Penn, will receive the award in New York City in July at a reception hosted by the Foundation.
Awards and Honors
Continued from page 4

**Department of Psychiatry Honors**

The Albert Stunkard Faculty Recognition Award is given annually to faculty members who are outstanding teachers and mentors. The graduating resident class selects award winners who have significantly influenced their education and training. Named for Albert J. Stunkard, MD, Emeritus Professor of Psychiatry and former Chair of the Department, this award recognizes Dr. Stunkard’s enormous contribution to the education, training, and support of Department housestaff. **E. Cabrina Campbell, MD, Scott A. Campbell, MD, Claudia F. Baldassano, MD, Theodore D. Satterthwaite, MD, MA, and Sarah B. Mathews, MD** received this honor in 2014.

**Theodore D. Satterthwaite, MD, MA** received the 2014 PGY-3 & 4 Teaching Award and **Spencer J. Kostinsky, MD** received the 2014 PGY-1 & 2 Teaching Award. These awards honor those individuals whom the residents believe were the most effective teachers of the academic year and exemplary in shaping their overall education.

**Steven Berkowitz, MD** was awarded the 2014 Martin P. Szuba Award for Excellence in Clinical Teaching and Research. This award is presented annually to a Department faculty member with outstanding teaching abilities, ongoing clinical research, and a focus on translating research concepts into clinically useful teaching, all of which Dr. Szuba embodied in his work.

**Ruth S. Fischer, MD** received the 2014 Annual Award for Clinical Faculty. This award, funded by a clinical faculty member, is given to a volunteer clinical faculty member who has demonstrated long-term loyalty to the Department and excellence in teaching and/or supervising.

**Michael E. Thase, MD** was the recipient of the 2014 Earl Bond Award. Initiated by the efforts of Dr. William Peltz, this annual award is given to a Department member who has distinguished himself/herself for teaching at the medical student, resident, and/or graduate levels.

**Claudia Sauerteig, MD** and **Steven Sust, MD** received the 2014 Dr. Henry P. and M. Page Durkee Laughlin Foundation Award. Upon the recommendation of the residency program, this award is given to residents in recognition of their professional achievement, dedication, and scholarship throughout residency training. Founded in 1964 through the generosity of Hank and Page Laughlin, the Dr. Henry P. and M. Page Durkee Laughlin Foundation is based in Frederick, Maryland. For more than thirty years, the Laughlin Foundation has honored outstanding residents in psychiatric training programs throughout the United States and the United Kingdom.

**David Lee, MD, Dan Lache, MD, and Erin Torday, MD** received the 2014 Kenneth D. Cohen, MD Psychodynamic Psychotherapy Award. This award is named as a tribute to the late Dr. Cohen in recognition of his outstanding teaching about psychodynamic understanding during his 54 years on the Department of Psychiatry faculty. He was a dedicated, tireless, and enthusiastic teacher who helped residents focus on the patient as a person and the essential importance of subjective experience. The prize has been endowed by the Cohen Family.

**Penn Honors**

**Anne Taylor, MD** received the 2014 Medical Student Teaching Award. This award is given to a resident who has been a consistently outstanding teacher of medical students.
News and Announcements

Announcements

New PBHMind Dates Being Added
Fall PBHMind symposia dates will be added soon, so please visit our website for more information about upcoming courses, CE credits, and PBHMind as a whole - www.pbhmind.com.

Hall Mercer Child and Parent Center Summer Program
The Hall Mercer Child and Parent Center Summer Program schedule and information are now available on the website. Please visit http://www.med.upenn.edu/hallmercer/program.shtml to learn more.

A Group Coaching Program for Adults with ADHD
Come learn essential time-management, organizational, and planning skills, and discover how mindfulness can help you manage stress and improve your attention and focus. For more information, please visit http://www.med.upenn.edu/add/adhd_group.html.

The Center for Cognitive Therapy (CCT)
The Center for Cognitive Therapy provides an active, directive, problem-focused outpatient therapy for a variety of clinical concerns, including mood disorders, anxiety and panic, life stressors, and many other issues. Patients will meet with a caring, respectful professional who will listen to their concerns, conceptualize the problem, and assist them in generating solutions and in building better psychological skills. The short-term and long-term benefits of cognitive therapy have been strongly supported by a wealth of research. Visit the CCT website at http://www.med.upenn.edu/cct/.

Penn Psychiatry Perspective
There will not be issues of the Penn Psychiatry Perspective eNewsletter in July or August. The monthly eNewsletter will return in September.

Enjoy the Summer!