

UNITED PRESS INTERNATIONAL



July 20, 2006

## HealthWrap: Autism and Alzheimer's

By Kate Walker  
UPI Correspondent

In what promises to be a fascinating development in the world of autism research, California scientists have discovered a discrepancy in the brains of men and boys with autism and those without.

The researchers found that the brains of those with autism contained on average 1 million fewer neurons in the amygdala region of the brain, which controls memory and emotion -- particularly fear -- than those without.

This latest research, which was published in the Journal of Neuroscience and conducted by scientists at the University of California in San Diego working with a team from the MIND Institute at the University of California in Davis, builds upon research conducted in the 1980s by a team of scientists at Harvard University where slices of the brain of an autistic man who died at the age of 29 were compared with that of a man of a similar age.

In the current study, the scientists compared the brains of nine people with autism with those of 10 typical people, and found that the brains of those with autism showed that the area of the amygdala called the lateral nucleus, which communicates with the part of the brain responsible for perception, had noticeably fewer neurons than the already decreased number present in the amygdala as a whole.

"The amygdala's involved in appreciating dangerous situations in the environment and generating an appropriate response to danger, which is probably fear and escape," said Dr. David Amaral of the MIND Institute. "Probably in a pathological state, this leads to anxiety."

The role of the amygdala in processing fear and anxiety may well explain why those suffering from autism suffer from abnormal fears, which could themselves explain a number of the peripheral problems experienced by autistics.

"If you have abnormal fears," Amaral asked, "how would that contribute, for example, to the development of normal social behavior or to the development of learning and memory and other areas?"

While this latest research is doubtless of scientific interest, it represents but the beginning of our increased understanding of autism. Other neurological conditions have been examined much further than autism, whose research is truly in its infancy. One day, it is hoped, these recent developments will be the building block for a much deeper level of understanding of the condition; they do not mark true understanding or a cure.

--

An Alzheimer's patch developed jointly by pharmaceutical giant Novartis and the University of California at Los Angeles appears to have reduced side effects when compared with the Alzheimer's pill, as well as being easier to use.

Dr. Bengt Winblad, a chief physician in geriatrics medicine at the Karolinska Institutet in Huddinge, and

colleagues studied the effects of the patch and found that when compared with traditional Alzheimer's pill-based medication it resulted in "significant benefits" in the cognitive abilities of those affected by Alzheimer's, as well as making it easier for them to control and engage in their daily routine.

"We think we have a new treatment strategy, and it will be very, very much used," Winblad said, addressing the International Conference on Alzheimer's Disease and Related Disorders in Madrid Wednesday.

"This has large practical implications, because both the patients and the caregivers really appreciate the patches. It's really very easy to use. You put it on dry skin once a day -- on the breast, or arm, or on the back, wherever you want -- and there really is no irritation.

"Caregivers were very satisfied," the physician added, "because they could really control for patients using the patches once a day. And it reduces side effects, which has been a problem in the past."

--

A new study published this week by the Journal of the American Medical Association has found that women who suffer from migraines with aura are subject to a significantly increased risk of cardiovascular disease.

Those women who suffered from migraines alone, the study found, were at no increased risk of cardiovascular disease. Auras are visual or physical abnormalities that closely precede the onset of migraines in some cases.

The study, led by Dr. Tobias Kurth of the Harvard School of Public Health, examined 10-year data from the Women's Health Study -- which itself looked at 27,840 women over the age of 45. It found that those who reported suffering from migraine with aura were twice as likely to be affected by major cardiovascular disease, myocardial infarction, ischemic stroke and ischemic cardiovascular death, and were 1.7 times as likely to endure coronary revascularization and angina.

"In this large prospective cohort of women, active migraine with aura was associated with an increased risk of subsequent overall and specific ischemic vascular events including coronary heart disease," the study's authors wrote.

"Since migraine without aura is far more common than migraine with aura, our data demonstrate no increased risk of CVD for the majority of migraine patients. Future research should focus on a better understanding of the relationship between migraine, aura status, and cardiovascular events."

--

The U.S. Food and Drug Administration has warned of previously unknown risks inherent in mixing certain prescription anti-depressants with some medications used in the treatment of migraine headaches.

Serotonin syndrome, a potentially life-threatening condition, can occur when selective serotonin/norepinephrine reuptake inhibitors, or SSRIs and SNRIs, used to treat depression are mixed with the triptans used to treat migraine, and results from a long-term excess of serotonin in the brain.

Those combining SSRIs and SNRIs with triptans can experience a range of side effects, the FDA warned, including hallucinations, restlessness, overactive reflexes, a loss in coordination, nausea, vomiting, diarrhea, rapid heart beat, changes in body temperature and increased body temperature.

Following the FDA's recommendations, pharmaceutical manufacturers will update their warning and side-effect information to alert users to the potential risk of the drug cocktail. Those currently taking triptan and also taking an SSRI or SNRI are advised to contact their doctor prior to stopping either treatment.

The most commonly prescribed SSRIs in the United States are Prozac, Zoloft, Paxil and Lexapro. The most common SNRIs are Cymbalta and Effexor. As for triptans, the best-known include Amerge, Axert, Imitrex and Zomig.

--

The FDA this week approved the contraceptive implant Implanon for use in the United States.

Implanon, which has been sold in more than 30 countries since its introduction in 1998 and is believed to be used by approximately 2.5 million women, is a 1.5-inch-long, matchstick-sized rod injected under the skin of the upper arm and is 99 percent effective as a contraceptive for three years.

The implant works by slowly releasing a low dose of progestin throughout the three years, preventing pregnancy, although it can be removed earlier if desired.

Progestin is a synthetic version of the hormone progesterone and works either by thickening cervical mucus, preventing sperm from fertilizing eggs, or by preventing ovulation itself.

As with other hormonal contraceptives, the contraceptive implant does put its users at a greater risk of a number of side effects, including blood clots. Smoking further exacerbates these risks in users.

Implanon is expected to hit the U.S. market in August, once doctors have undergone mandatory training covering inserting and removing the implant. There is no word as yet regarding its projected cost, although it is expected to be in line with that of other hormonal contraceptives.

--

E-mail: [consumerhealth@upi.com](mailto:consumerhealth@upi.com)

 Copyright © 2006 UPI. Displayed by permission. All rights reserved.

You may forward this article or get additional permissions by typing [http://license.icopyright.net/3.5981?icx\\_id=20060720-013606-5059r](http://license.icopyright.net/3.5981?icx_id=20060720-013606-5059r) into any web browser.