

## J33 Imaging Dementia

August 2009

Intro: Memory loss, personality changes, a shrinking ability to do daily tasks. It's not easy to watch a loved one suffer from dementia. It's also not easy at times for doctors to know exactly what kind of dementia a person may have. That's because there's not been a test that can differentiate between, say, Alzheimer's disease and Lewy Body Dementia. Now, researchers at Mayo Clinic have developed a way to look at the living brain and more accurately tell what type of dementia a person has. And this may help get patients on the right treatment.

### **Video**

### **Audio**

**Total running time 1:38**

AT A DISTANCE THESE SCANS  
LOOK LIKE TYPICAL PICTURES OF  
A BRAIN TAKEN DURING AN MRI.  
BUT AT CLOSER LOOK THEY  
REVEAL INFORMATION  
RESEARCHERS USED TO ONLY  
GET DURING AN AUTOPSY.

**CG :11 to :16**

**Prashanthi Vemuri, Ph.D.  
Mayo Clinic**

"WE ARE MAINLY LOOKING AT THE  
MOST COMMON FORMS OF  
DEMENTIA."

**CG:37 to :46**  
**Standup**  
**Vivien Williams**  
**Reporting**

DR. PRASHANTHI VEMURI SAYS  
THOSE FORMS ARE ALZHEIMER'S  
DISEASE, DEMENTIA WITH LEWY  
BODIES AND FRONTOTEMPORAL  
DEMENTIA. SHE'S DEVELOPED  
COMPUTER SOFTWARE THAT,  
WHEN USED IN CONJUNCTION  
WITH STANDARD MRI, ALLOWS  
DOCTORS TO BETTER  
DIFFERENTIATE BETWEEN THESE  
THREE DISEASES. WITHOUT THE  
HELP OF THIS TECHNOLOGY THE  
DISEASES CAN BE TRICKY TO TELL  
APART. THAT'S A PROBLEM  
BECAUSE, FOR EXAMPLE,  
MEDICATIONS USED TO TREAT  
ALZHEIMER'S DISEASE MAY NOT  
HELP AND MAY EVEN BE HARMFUL  
IF YOU ACTUALLY HAVE DEMENTIA  
WITH LEWY BODIES. DR. VEMURI'S  
TECHNOLOGY LIGHTS UP THE  
PARTS OF THE BRAIN AFFECTED  
BY THESE THREE MOST COMMON

FORMS OF DEMENTIA. YOU CAN SEE THE DIFFERENCES BETWEEN ALZHEIMER'S DISEASE, DEMENTIA WITH LEWY BODIES AND FRONTO TEMPORAL DEMENTIA. AND WHILE AT THIS TIME MEDICATIONS ONLY TREAT SYMPTOMS AND NOT THE UNDERLYING DISEASE, DR. CLIFFORD JACK SUGGESTS THAT WILL SOON CHANGE. AND THIS NEW TECHNOLOGY MAY BE KEY TO GETTING PEOPLE ON THE RIGHT MEDICATIONS.

**CG 1:11 to 1:25**  
**Clifford Jack, M.D.**  
**Mayo Clinic**

“IT’S QUITE REASONABLE TO SUSPECT THAT FAIRLY SOON THERE ARE GOING TO BE TREATMENTS THAT EITHER SLOW OR ARREST THE UNDERLYING DISEASE PROCESS THAT’S CAUSING CLINICAL SYMPTOMS.”

AND WHEN THESE MEDICATIONS BECOME AVAILABLE, DR. JACK

SAYS DOCTORS CAN USE THIS  
TECHNOLOGY TO HELP THEM  
FIGURE OUT WHICH DISEASE TO  
TREAT SO THEY CAN BETTER  
CARE FOR THEIR PATIENTS. FOR  
MEDICAL EDGE, I'M VIVIEN  
WILLIAMS.

Anchor tag:

For more information on different type of dementia and dementia research, visit our Website at...[STATIONS: Per the licensing agreement, please provide a link from your station's website to <http://www.mayoclinic.org> or voice tag "mayoclinic.org" for more information.]