High-tech test not so effective

Computer-aided mammography might not help spot cancer

BY KATHRYN DOYLE

Computer-aided detection, a part of almost all mammograms today, appears not to improve diagnostic accuracy for breast cancer screening, according to a large study.

Computer-aided detection, or CAD, marks areas of concern on mammogram readouts that radiologists might otherwise miss. It was approved by the Food and Drug Administration in 1998 and became common after the Centers for Medicare and Medicaid Services increased reimbursement for the technology in 2002, the authors write.

Since then, it has been hard to measure how much difference CAD actually makes in spotting cancers.

"There's been a lot of controversy about whether or not CAD improves performance, and the largest studies haven't supported improvement," said Dr. Constance Lehman of Massachusetts General Hospital in

BY KATHRYN DOYLE

According to a reanalysis of

the original data from a 2001

study of paroxetine, or Paxil,

for teens with major depres-

sion, the drug was not effective

and led to serious side effects,

which is not how the results

ings about paroxetine for a

long time," including a 2007 Food and Drug Administra-

tion advisory on the risk of

increased suicidality when

antidepressants like parox-

etine or imipramine are used

to treat people age 18 to 24,

according to Dr. Jon Jureidi-

ni of the University of Ade-

The authors of the 2001

study did not report this side

effect, although the evidence

was there, said Jureidini, a

people around the world have

raised concerns," he told Re-

uters Health by phone.

"A broad community of

The original trial, known

'Study 329,' ran from 1994

to 1998 and included 275 teens

with major depression. For

eight weeks, about a third of

them received 20 to 40 milli-

grams of paroxetine, another

third received up to 300 mg of

imipramine (Tofranil), and a

The researchers, support-

ed by paroxetine's maker

GlaxoSmithKline, measured

the participants' total Hamil-

ton depression scale score be-

third received placebo pills.

co-author of the reanalysis.

laide in Australia.

"There have been warn-

were presented 14 years ago.

REUTERS

Boston, who led the new cancer detection rate did not cine, doesn't think patients

"Prior studies were done on CAD technology on the very early curve of its adoption," and radiologists may not have been comfortable using it yet, Lehman told Reuters Health by phone.

For the new study, she and her coauthors only considered mammograms reviewed by radiologists who had been working with CAD for at least a year.

Between 2003 and 2009, the nearly 324,000 women in the study had nearly 626,000 digital screening mammography exams, including 495,818 that were interpreted with CAD and 129,807 that were interpreted without it.

The mammograms were interpreted by 271 radiologists at 66 facilities.

Within a year after mammography, 3,159 women were diagnosed with breast

Radiologists correctly detected a breast cancer about 85 percent of the time, regardless of whether CAD was rial published with the findinvolved. In other words, the ings in JAMA Internal Medi-

health assessment scales.

effective and safe.

mine group.

The original published re-

In the new analysis, Jure-

idini and colleagues found

that neither paroxetine nor

imipramine were better than

placebo for any measure of

depression. Furthermore, the

drugs did notably increase

harms, like suicidal thoughts

and behavioral problems in

the paroxetine group and

heart problems in the imipra-

According to Jureidini's

team, the original analysis

departed from the stated pro-

tocol for the study and in-

cluded four more clinical end-

points that were not part of

the original design, but were

introduced after the data had

been collected, which allowed

the investigators to present

side effects seemed to be

lower because the authors

only included problems that

affected at least five percent

The reanalysis, published

in the BMJ, was part of the

"restoring invisible and

abandoned trials," or RIAT,

initiative that began in 2013

and is aimed at publishing

undisclosed trial outcomes or

correcting misleading publi-

The RIAT organizers iden-

tified questionable studies

and contacted original study

funders and authors asking

them to publicize their re-

cations

of the study participants.

The original number of

the results as positive.

sults described paroxetine as

New analysis refutes 2001 Paxil study

change based on CAD tech-

looked specifically at about 100 radiologists who interpreted mammograms with and without the computer readout, they found that the radiologists actually detected fewer cancers with CAD mammograms.

CAD now costs more than \$400 million yearly, without an established benefit for patients, the authors write.

"Literally hundreds of thousands of women are undergoing this and in many cases paying out of pocket,' Lehman said.

Radiologists should be thoughtful about how they are using CAD — it may be useful for spotting calcifications, but just because it does not mark an area as concerning doesn't mean that area should be ignored, she said.

Dr. Joshua J. Fenton of the University of California, Davis Health System in Sacramento, who wrote an edito-

original authors and the jour-

nal where they published, the

Journal of the American

Academy of Child and Ado-

lescent Psychiatry, did not

agree to make corrections, so

another group of researchers

set out to reanalyze their now

public data.

should be alarmed.

'CAD seems to be having, When the researchers on balance, little if any effect," he told Reuters Health by phone.

Fenton said he's not surprised that CAD did not yield substantial benefits, and he questions whether Medicare should be reimbursing for it.

"If it weren't reimbursed then a lot of radiologists would have the freedom to say I don't want to use CAD, Fenton said.

To change reimbursement, strong political leadership would need to make a compelling argument for why CAD is not a good use of taxpayer money, he said.

We need to be more rapid in assessing new technology," Lehman said. "We are advancing so quickly in technology development, we need to get quicker at assessment.'

"In my practice I'm not sure if I'm going to stop using CAD, but I question if it makes sense to charge for CAD if I'm using it to diagnose cancer," Lehman said.

OBITUARIES

In Memoriam

In Loving Memory Of KATIE M. WINGATE



OUR BELOVED KATIE

Why not I in sadness pass? Why not I in shadows cast. Obscure the tragic history, And take your place to set you free.

Our eternal remembrance and love Dad, Mom, Jenn, Noelle, Courtney, Justin, Jordan

In Loving Memory Of MATTHEW H. GILMAN Feb 12, 1953 - Sep 29, 2013



In Loving Memory Of **GARY FLOYD MARTIN** Dec. 8, 1963 - Sept. 29, 1989



Angels and butterflies fly together reminding us that forever. Love your family and all who love you.

Committal Services

PETER J. VANIER

CARIBOU - There will be a committal service for Peter Vanier on Saturday, October



FRANCES L. SAWYER

GLENBURN - Frances L. Sawyer, 78, died unexpectedly May 26, 2015, in Ellsworth. She was born in Bangor on April 24, 1936, daughter of the late David and Jessie (Bowden) Lane.

She was predeceased by her husband, Charles Sawyer Sr., on Oct. 17, 2011. Both are missed greatly.

A graveside service will be held 3:30 p.m. on Friday, Oct. 2, 2015, at Glenburn Cemetery, Lakeview Road.

In Memoriam

In Loving Memory Of **SHARON BARROWS**



It was a year ago today Pattie and I held on to you so tight, wanting to never lose the fight. Not a day goes by my friend when I don't think of you. I still shed many tears and my heart still hurts of missing you, but I always end with a smile and special memories. I was so blessed to have you in my life and be able to call you my friend. You were the most generous, giving and

known. You brought so much joy to so many lives. I never see a backpack without thinking of all the ones you bought and filled

kind person I have ever

to help children in need. Even seeing pet food reminds me of all the times you bought it to give to the elderly so they could keep their pets. Every time I hug my children I think of how much you loved yours. You were so giving and loving in so many ways and asked so

embrace all the wonderful memories we shared. All the laughs, tears, good times and bad. Until we meet again my friend, I will always have my memories. Linda

little in return. How I

sults or correct their pubfore and after treatment, as well as several other mental lished results. history, which resolved Alligator attack victim shows resilience

BY BETH KASSAB ORLANDO SENTINEL

ORLANDO, Florida — The moment the alligator clamped down on Rachael Lilienthal's right arm she softly touched its head with her left, as if to convince herself of what was

happening "I think it was then that I paused and I prayed," she remembered in her first interview since the attack seven weeks ago on the Wekiva River. "It was a simple prayer. It was bless us, protect us, keep us well.'

The alligator didn't let go. So this time Lilienthal, 37, pounded the reptile's head.

"This made him angry, so turned me under the water," she said.

Each time the gator dragged her under — she's not sure how many - she didn't know how long it would be until she surfaced.

"At one point I could feel my arm break," she said. "And I was so upset that I had to deal with a broken arm."

She looks back now, almost bemused at how in the moment she worried about getting a cast.

The gator let her back up and she looked around and called to the nearest people, a

group of women in a canoe. They were struggling to maneuver their canoe, but had whistles and started blowing them.

"They played a very important part," she said. "They let everybody know there was a problem."

Then Krista Karlsen and her boyfriend Casey Spencer paddled their kayak over.

Lilienthal calls them "heroic" and marvels at how they didn't hesitate or consider their own safety.

Casey began to hit the alligator with his paddle.

The gator then rolled Lilienthal so violently her bathing suit was torn off.

"One last time, Casey got the alligator I think right on the head with the paddle really hard," she said. "And, I guess luckily because it could have been so much worse, the alligator took off with my

This is one of the incredible things about Rachael Lil-

Even when reflecting on the most terrifying of moments, she finds the silver lining: It just took her arm.

She is also incredibly

For the kayakers. "They saved the day," she

For the Eagle Scout nearby in a canoe who helped get her to the dock at Wekiva Island.

For the powerful man who reached down and pulled her

"He somehow lifted me out of the water by one arm," she said. "I do not know who that

"This isn't out and out scientific fraud," said professor David Henry of the Institute for Clinical Evaluative Sciences in Ontario, Canada, who coauthored an editorial in the BMJ on the importance of clinical data sharing.

"This is a subtle form of manipulation of the analysis of the data and interpretation of the results that may actually happen quite often," Henry told Reuters Health by

It takes a lot of time and effort to reanalyze this type of data, and academic reviewers are not paid to do it, so it often does not happen, he said. "Statistical analysis is not

black and white, you can make a drug look better than it actually is," Henry said. Although paroxetine and imipramine were prescribed for kids and teens following

the 2001 publication, this new paper won't have a big effect on clinical practice, as those prescriptions are much less common now following the FDA advisory and other red flags, he said.

In 2012, GlaxoSmithKline agreed to pay three billion dollars in the largest healthcare fraud settlement in U.S.

thank him if anybody knows

a towel and covered her. Even

in her panic she remembers

being terrified that she was

And for the paramedics.

mouth to the operating room

in less than one hour," she

the ambulance, and the panic

the professionals I gave up

and I cried for my mommy,"

she remembered, looking

over at her mother, Cindy

They both choked back the

It's been seven weeks since

emotion of remembering that

Lilienthal went to Wekiva Is-

land with a friend. They ca-

noed. She drank a smoothie

(and no alcohol, as some have

speculated). He ate a sand-

water to cool off.

They decided to get in the

Her friend got back out,

She did a few butterfly

but Rachael, who has a pas-

sion for swimming, decided

strokes and chatted with

some people in a canoe — the

same women who would later

blow the whistle to help save

The river was crowded. in a ponytail.

to stay in a bit longer.

that washed over her.

Kruger.

"I was from alligator's

She remembers being in

"Once I was in the hands of

For the person who ran for

who that is."

report safety data for some of their products, including Paxil. Dr. Martin Keller of Brown

branded drugs and failing to

In the case of Study 329, the claims of introducing mis-

University and eight of the 22 authors of the original JAA-CAP paper wrote a letter to the industry site Retraction Watch in response to the reanalysis. Keller shared a copy of the letter with Reuters Health; in it, he and his colleagues express "strong disagreement" with many of the points raised in the BMJ

"That one can do better reanalyzing adverse-event data using refinements in approach that have accrued in the 15 years since a study's publication is unsurprising and not a valid critique of our study as performed and presented," Keller and his coauthors write. "In summary, to describe our trial as 'misreported' is pejorative and wrong, both from consideration of best research practices at the time, and in terms of a retrospective from the standpoint of current best practices.

Jureidini says open data sharing could prevent this kind of problem from happening again.

"All of the problems with the [original] paper, none would have been there if their data and protocol were publicly available at publication," Jureidini said.

"A call has been made for drug companies to publish data, not papers," he said.

weeds.

alligator.

tack people.'

ward Lilienthal.

and former lifeguard.

leave the bank on the other

side of the river and swim to-

have been best the alligator

got her, a strong swimmer

someone else, would they

have been as comfortable in

the water?" she asked. "I

think that most people would

not have had such a favorable

her alive that day still shows.

grad, teaches Spanish at Roll-

ins College and plans to be

back in the classroom by Jan-

hard now. Like getting

dressed, or putting her hair

But the simplest things are

In a way, she says, it might

"If that gator had gotten

3rd at 10AM at St. Thomas Aquinas Cemetery, Madawaska. A reception for family and friends will follow from 11-1PM at Long Lake Sporting Club, Sinclair. A reception will also be held from 4:30-7PM at The Par and Grille, Caribou. Please join us to Celebrate the Life of Peter Vanier.

www.athutchins.com



JOE BURBANK | ORLANDO SENTINEL | TNS

Rachel Lilienthal, the Orlando, Florida, woman who lost an arm in an alligator attack seven weeks ago, talks to the Orlando Sentinel at her home on Friday.

Once right-handed, she's learning to write and type with her left. She is thankful for health

insurance, but it's still unclear if it will cover the kind of prosthetic arm Lilienthal hopes to have one day.

Her friends set up a fund-Those silver linings, again. raising account — GoFund-The resilience that kept Me.com/wekivarachael-com to help cover her many ex-Lilienthal, a Florida State penses

Her occupational therapist helped her find a special cutting board so she can cut fruit and vegetables with one hand

for salads. 'This morning I singlehandedly made my awesome mother a great cup of coffee

with cashew mylk," wrote on Facebook last "That was the day she got

back from the hospital," her mother, Kruger, remembered. "She's done a lot in that amount of time. Kruger, who lives in sub-

urban Philadelphia, has stayed with Lilienthal since the accident. She showed her videos of

paralympic swimmers. And, one day, Lilienthal

knows she'll swim again. Until then she has decided to tackle the small things.

And, as she puts it, find the peace that comes with being