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Young adult HIV patients may be at increased risk of hypertension

Eli Zimmerman

Young adults with perinatally-acquired HIV are at an increased risk of developing hypertension, according to a study presented at IDWeek 2017, an infectious diseases conference.

With advances in HIV care and treatment increasing the lifespan of perinatally infected children, patients are seeing increased risks of HIV-associated, non-AIDS conditions like hypertension.

"Hypertension in HIV appears to be the result of an interplay between conventional risk factors and HIV specific risk factors, including direct and indirect antiretroviral toxicity (ART), immune deficiency and activation, and inflammation," said presenter Patrick Ryscavage, MD, infectious disease specialist at the University of Maryland, Baltimore.

While the prevalence of hypertension in older HIV patients has been studied thoroughly, rates among younger, perinatal HIV populations is relatively unexplored, said Dr. Ryscavage.

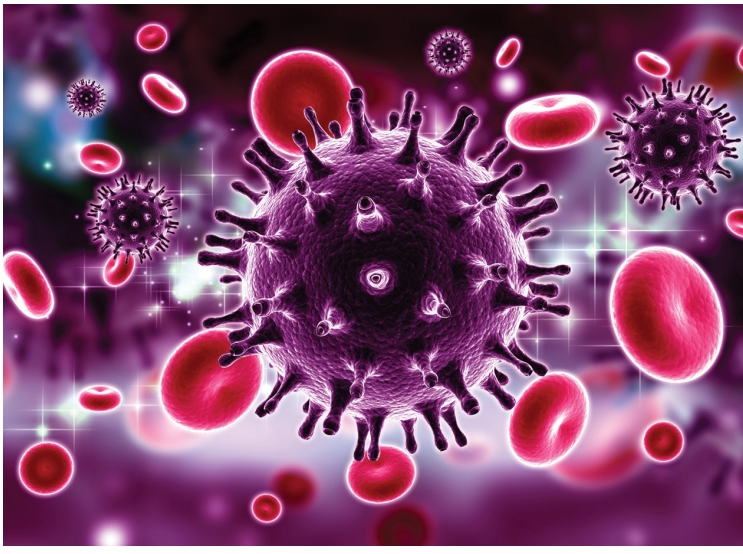
Investigators examined 324 patients between the ages of 18-29 years, split between three arms for a cross sectional study: 108 patients with perinatally-acquired (PA) HIV, 108 patients with non-perinatally acquired (NPA) HIV, and 108 uninfected (UI) patients. The 3 study arms were a median age of 24 years, 95% black, and a slight majority female.

Dr. Ryscavage and fellow investigators defined systemic hypertension as two systolic blood pressure measurements greater than or equal to 140 mm Hg, or diastolic measurements greater or equal to 90 mm Hg within 3 months, or if a physician prescribed antihypertensive mediation.

The researchers discovered that, while UI patients had the highest prevalence of obesity, PA patients reported the highest rate of chronic kidney disease (19%) and dysplidemia (13%), compared to NPA (1% and 3% respectively) and UI (0% and 5% respectively) patients.

Hypertension prevalence was highest among PA patients, followed by NPA patients, and then UI at 23%, 10%, and 9% respectively.

Young adults with PA HIV were nearly 5 times as likely to have hypertension (aOR 4.7; CI 95% [1.9-11.5]) compared to the uninfected population, while NPA showed no significant difference compared to the uninfected (aOR 1.7; CI 95% [.7-4.6]).



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Investigators checked to see if the increase in hypertension could be related to the high rate of chronic kidney disease, but were not successful.

"We found [chronic kidney disease] to be approximately one third increased odds of association with chronic kidney disease," Dr. Ryscavage explained. "However excluding kidney disease, the prevalence odds ratios remained significant and in the context of the cross sectional study… it was difficult to establish a directional relationship between chronic kidney diseases and hypertension."

This study was limited by using one center in West Baltimore. Also, due to a majority of patients having at least one deceased parent, investigators were not able to collect a complete family history.

Dr. Ryscavage and his colleagues are next looking for what specific factors in HIV groups are causing an increased prevalence. Meanwhile, the investigators implored other researchers to initiate studies in poorer nations where HIV is much more prevalent.

"These findings need to be explored in the developing world where we have the largest population of aging, perinatally infected patients," said Dr. Ryscavage.

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Disclosures: Presenters reported no relevant financial disclosures.

Written exposure therapy rivals cognitive processing therapy for PTSD

Ian Lacy

Cognitive processing therapy may offer a greater benefit over time for posttraumatic stress disorder, but writing therapy offers a viable treatment in fewer sessions.

"Our results add to mounting research showing that the dose of therapy needed for beneficial outcomes for individuals with PTSD is not as large as what was once previously thought," wrote Denise M. Sloan, PhD, of the National Center for PTSD, Boston, and her colleagues. "Our findings extend those prior studies by demonstrating that not only can PTSD symptoms be reduced significantly with less therapeutic exposure but that not as many therapy sessions are required."

In a 1:1 randomized clinical trial, Dr. Sloan and her colleagues compared the effectiveness of written exposure therapy (WET) and cognitive processing therapy (CPT) in treating PTSD in 126 veteran and nonveteran adults, split evenly into the two therapy groups. The WET protocol included 5 sessions in which the patient wrote for 30 minutes about a traumatic event and focused on details of the event, including thoughts and feelings associated with it. The CPT intervention was a 12-session trauma-focused therapy with a limited take-home writing component. It focused on helping patients recognize and challenge dysfunctional cognitions associated with traumatic events, the investigators wrote in JAMA Psychiatry.

When Dr. Sloan and her colleagues looked at the patients' mean Clinician Administered PTSD Scale for DSM-5, or CAPS-5 score, a measure of PTSD symptom severity, they found that the WET and CPT groups' scores were similar at 6 weeks, 12 weeks, and 36 weeks. At the 24-week assessment, the CAPS-5 score for those in the CPT group (20.92) was significantly lower than it was for those in the WET group (25.23) (mean difference, 4.31 points; 95% confidence interval, –1.37 to 9.99).

In addition, the CPT group had a higher dropout rate (31.7%) than did the WET group (6.3%). The investigators concluded, however, that both therapies are effective. "Written exposure therapy should be considered by clinicians to be a viable treatment option that can address some of the barriers to receiving and implementing CPT and prolonged exposure that have been noted in health care settings," Dr. Sloan and her colleagues wrote.

Disclosures: This study was funded by a grant from the National Institute of Mental Health. None of the authors had financial conflicts to report.

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Large database analysis suggests safety of bariatric surgery in seniors

Ted Bosworth

Gastric bypass and sleeve gastrectomy procedures for weight loss should not be denied to patients older than 60 years, despite a slight increase in unadjusted mortality rates, according to an analysis of data from the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP).

Based on data that was collected in 2015 and submitted to MBSAQIP, "bariatric surgery is safe in the elderly, even in those 70 years old and older," reported Tallal Zeni, MD, director of the Michigan Bariatric Institute in Livonia.

Although the analysis was drawn from one of the largest datasets to evaluate the safety of bariatric surgery in the elderly, it is not the first to conclude that morbidity and mortality rates are acceptably low, according to Dr. Zeni. This may explain why the proportion of bariatric procedures performed in patients 60 years of age or older has been increasing. In figures provided by Dr. Zeni, that proportion rose from 2.7% during 1999-2005 to 10.1% during 2009-2013.

There were 16,568 patients older than age 60 years entered into the MBSAQIP database in 2015. When those were compared with the 117,443 younger patients, the unadjusted rates of morbidity (6.5% vs. 6.0%) and mortality (0.3% vs. 0.1%) were higher for the older patients, but "they are close," according to Dr. Zeni. Both rates reached significance by the conventional definition ($P < .05$), but he suggested that they are lower in this study than those in prior studies of MBSAQIP datasets and that they are acceptable relative to the anticipated health benefits.

Above the age of 60 years, no correlation could be made between increasing age and increasing risk of morbidity, mortality, or rate of reoperations, according to Dr. Zeni.

Why should bariatric surgery be considered in older patients? He cited data from a study that showed the life expectancy in a 70-year-old without functional limitations is 13 years. As a result, he added, "it behooves us to provide them with the best quality of life we can."

Relative to prior MBSAQIP evaluations of bariatric surgery in the elderly, the proportion of patients undergoing sleeve gastrectomy relative to gastric bypass has been increasing, Dr. Zeni reported. In the analysis, approximately two-thirds of the bariatric procedures were performed with sleeve gastrectomy, which is higher relative to what previous MBSAQIP analyses have shown.

Based on rates of morbidity for those two surgical approaches in the analysis, that trend makes sense. While the higher 30-day mortality for gastric bypass, compared with sleeve gastrectomy, was not significant (0.38% vs. 0.26%; $P = .221$), all-cause morbidity was almost two times greater for those undergoing gastric bypass than it was for those undergoing sleeve gastrectomy (10.61% vs. 5.81%; $P < .001$), Dr. Zeni reported.

However, some of that difference may be explained by baseline disparities between the two groups. In the gastric bypass group, there were higher rates of preoperative diabetes (54% vs. 40%; $P < .001$), sleep apnea (57% vs. 50%; $P < .001$) and hyperlipidemia (59% vs. 54%; $P < .001$). Also, gastric bypass patients were more likely to have a history of a previous bariatric procedure

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(11% vs. 8.5%; $P < .001$) and to have a American Society of Anesthesiologists Physical Status score of 3 (84% vs. 80%; $P < .001$), according to Dr. Zeni.

The specific complications more common in the gastric bypass group than the sleeve gastrectomy group included anastomotic leak (0.56% vs. 0.3%; $P = .017$), surgical site infection (1.74% vs. 0.61%; $P < .001$), pneumonia (0.87% vs. 0.32%; $P < .001$), and bleeding (1.14% vs. 0.5%; $P = .024$). Although the average operating time was 40 minutes longer in the bypass group, there were no significant differences in thromboembolic complications.

Overall, despite a modest increase in the risk of complications for bariatric surgery in elderly patients, that risk can be considered acceptable in relation to the potential health benefits, according to Dr. Zeni. He suggested that the data might encourage further growth in the rates of bariatric procedures among patients older than 60 years.

Disclosures: Dr. Zeni reports no relevant financial relationships.

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Who fares best after successful ECT?

Bruce Jancin

Older patients with a psychotic depression and complete remission within the first four electroconvulsive therapy sessions are the ones with the best chance of remaining relapse free for at least 6 months, Pascal Sienaert, MD, PhD, reported at the annual congress of the European College of Neuropsychopharmacology.

This conclusion is based on the results of two prospective studies by ResPECT – the Research in Psychiatry and ECT by the Flemish-Dutch Research Consortium – which, in turn, confirm the findings of an earlier metaanalysis of 32 studies including 702 patients conducted by investigators at Trinity College Dublin, noted Dr. Sienaert, a psychiatrist at the Catholic University of Leuven (Belgium) Academic Center for ECT and Neuromodulation.

That being said, it's now clear that adequate maintenance therapy after successful ECT is the best way to reduce the risk of relapse, he said. The metaanalysis showed that continued use of antidepressant medications after successful ECT halved the 6-month risk of relapse, with an impressive number needed to treat of 3.3. Yet, the 12-month risk of relapse remained substantial, at 51%, and the Irish investigators stressed that maintenance treatment strategies need to be improved (Neuropsychopharmacology. 2013 Nov;38[12]:2467-74).

Dr. Sienaert noted that the relapse rate in the ECT metaanalysis is nearly identical to that reported in the landmark Sequenced Treatment Alternatives to Relieve Depression (STAR*D) trial in real-world patients with major depression who achieved remission in response to second-step or later antidepressant medication.

"It's a common misconception that relapse is higher after ECT than medication," the psychiatrist said.

In the ECT metaanalysis, continuation ECT after induction of remission did not substantially affect the relapse risk. But that's because the prevailing maintenance ECT strategy in the studies included in the 2013 metaanalysis relied upon a fixed-dose treatment schedule, according to Dr. Sienaert.

"In most studies, fixed-schedule maintenance ECT is used and with rather high relapse rates. Most clinicians have the experience that flexible, clinically driven on an as-needed-basis maintenance ECT has lower relapse rates," he said. "Still, relapse remains the most pressing issue in the field, and it is very difficult for us as clinicians to predict which patients will relapse and which will not."

That's where the two ResPECT studies come into play.

In one of the studies, 116 patients with major depression at three tertiary psychiatric hospitals were randomized double blind to twice-weekly high-dose ultrabrief pulse (0.3-0.4 milliseconds) right unilateral or high-dose brief pulse (1.0 millisecond) right unilateral ECT. The dosing was at eight times the seizure threshold until remission as defined by a Montgomery-Åsberg Depression Rating Scale (MADRS) score below 10 or for a maximum of 6 weeks. Among the 87 completers, the remission rate was 68% in the brief pulse group, significantly higher than the 49% rate with ultrabrief ECT. Cognitive effects on semantic and lexical memory, and retrograde amnesia were the same in the two groups (J Clin Psychiatry. 2013 Nov;74[11]:e1029-36).

Bruce Jancin/Frontline Medical News

Dr. Pascal Sieneart

Dr. Sienaert and his coinvestigators then prospectively followed the 50 remitters for 6 months, during which all but one patient remained on antidepressant medication. The relapse rate, defined as rehospitalization for depression, restart of ECT, suicide, or a MADRS score above 15, was 25% at 3 months and about 40% at 6 months. The investigators found several predictors of a lower relapse rate. The strongest was early complete remission as defined by a Clinical Global Impressions Scale score of 1 out of a maximum of a possible 7 points within the first four ECT sessions: The 6-month relapse rate was 10% among those early complete remitters versus 63% in the other remitters (J Affect Disord. 2015 Sep 15;184:137-44).

"These are very small numbers in these groups, but the signal that emerges is the same as we have seen in the Irish metaanalysis: Early complete remitters were older, had shorter current episodes of depression, and showed more baseline psychotic features," Dr. Sienaert said.

In a more recent ResPECT consortium study, the Mood Disorders in Elderly Treated With ECT (MODECT) study, 110 patients aged 55 and older with unipolar depression treated by ECT were followed with serial brain imaging studies prior to and for 6 months post treatment in an effort to gain insight into the mechanism of the particularly strong benefit of ECT in late-life depression. The response rate to ECT was significantly higher in those with onset of depression at age 55 or older than in those with disease onset before age 55, by a margin of 87% vs. 67%. The presence of baseline psychotic symptoms also was associated with a higher response rate.

In contrast, treatment response proved unrelated to changes in hippocampal volume, white matter hypersensitivities, amyloid load, or serum brain-derived neurotrophic factor, which is believed to be an important mediator of neuroplasticity. Thus, ECT's mechanism of action in late-life depression remains elusive, the authors reported (Am J Geriatr Psychiatry. 2017 Feb;25[2]:178-89).

In a separate study, Dr. Sienaert and his colleagues found that ECT's superior efficacy, compared with antidepressant medication in patients with late-life depression, was independent of their vascular disease burden. The study population was comprised of 81 patients in an antidepressant drug trial and 43 in an ECT trial, all of whom were inpatients with unipolar major depression. Their mean age was in the mid-70s.

The investigators gauged vascular burden by adding up each patient's number of vascular risk factors, namely, diabetes, hypertension, smoking, hypercholesterolemia, known cardiovascular disease, and cerebrovascular disease. The depression remission rate was 80% in the ECT patients with no vascular risk factors, dropping to 58% in those with one or more. In the antidepressant drug trial participants, the remission rate was 38% in those with no vascular risk factors, compared with 32% in patients with one or more. Using different cutoffs for the number of vascular risk factors did not significantly alter the results (Int J Geriatr Psychiatry. 2018 Feb; 33[2]:371-8).

At present, once a patient has achieved remission in

response to ECT, most psychiatrists stop the therapy altogether. That's often a mistake, according to session cochair Eduard Vieta, MD, PhD.

"ECT is the only treatment where people expect that it works acutely, and then we can stop it and nothing happens. That's too much to expect. In many cases you need to continue ECT. Especially in patients who are refractory or treatment resistant, I don't see a reason why maintenance ECT shouldn't be the first choice. Yet in the guidelines, ECT is always the third- or fourth-line therapy," said Dr. Vieta, professor of psychiatry at the University of Barcelona and scientific director of the Spanish Research Network on Mental Diseases.

Dr. Sienaert concurred, adding that he has patients who are on weekly maintenance ECT for as long as 16 years, with continued good results.

Disclosures: Dr. Sienaert reported having received honoraria from Mecta, a manufacturer of ECT equipment.

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