

Clinical Briefs in Primary Care

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Evidence-based updates in primary care medicine

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Recognizing Binge Eating Disorder

SOURCE: Kornstein SG. Epidemiology and recognition of binge-eating disorder in psychiatry and primary care. *J Clin Psychiatry* 2017;78(Suppl 1):3-8.

The diagnostic criteria for binge eating disorder includes at least weekly episodes of binge eating for at least three months.

Binge eating is described as ingesting, in a circumscribed period, a significantly larger amount of food than is typical; characteristically, sufferers feel a lack of control over how much they eat during the episode, and are not driven by sustained hunger.

In contradistinction from anorexia nervosa or bulimia nervosa, post-meal purging (or other compensatory measures such as hyper exercising or excessive laxative use) is not part of the diagnosis.

Binge eating disorder is more common than anorexia and bulimia, the two most well-known eating disorders. Part of the lack of recognition of binge eating disorder stems from its relatively recent inclusion as a specific eating disorder.

There are screening tools available for binge eating disorder appropriate for use in primary care settings, and Kornstein suggested inclusion of at least one screening question in routine care about eating habits such as “Do you ever feel a loss of control over how much you eat?”

Psychological as well as pharmacologic

therapies (primarily antidepressants) have been demonstrated to produce some benefit for binge eating disorder. Because binge eating disorder is more common in persons with obesity, screening potentially is more useful in this population. ■

Preventing Sickle Cell Disease Pain Crises

SOURCE: Ataga KI, Kutlar A, Kanter J, et al. Crizanlizumab for the prevention of pain crises in sickle cell disease. *N Engl J Med* 2017;376:429-439.

P-selectin is a protein within endothelial cells, megakaryocytes, and platelets that functions during inflammation to enhance adhesion of leukocytes and other cells to the site of inflammation. In sickle cell disease, platelets, erythrocytes, monocytes, and neutrophils can aggregate to compound circulatory flow problems, which lead to painful vaso-occlusive crises symptoms. In animal models of sickle cell anemia, deficiency in P-selectin (and E-selectin) is protective from vaso-occlusive episodes.

Crizanlizumab is a monoclonal antibody that blocks interaction between P-selectin and its receptor. In a double-blind, randomized, placebo-controlled trial of crizanlizumab, subjects (n = 198) who had experienced at least two sickle-cell pain crises within the prior 12 months were in enrolled and followed for one year.

Patients on crizanlizumab enjoyed a 45% reduction in painful crises compared to placebo. Adverse events potentially related to treatment included arthralgia,

diarrhea, pruritus, vomiting, and chest pain. Crizanlizumab has been demonstrated to be highly effective in reducing painful crises related to sickle cell disease. ■

Antisocial Behavioral Syndromes in the United States

SOURCE: Goldstein RB, Chou SP, Saha TD, et al. The epidemiology of antisocial behavioral syndromes in adulthood: Results from the National Epidemiologic Survey on Alcohol and Related Conditions-III. *J Clin Psychiatry* 2017;78:90-98.

The National Epidemiologic Survey on Alcohol and Related Conditions-III (NESARC-III) has provided data about the prevalence of antisocial behavioral syndromes in the United States. The societal burden incurred from persons with antisocial personality disorder is substantial, since the disorder is associated with impulsive aggressive behaviors for which the sufferer lacks remorse. Consequences include acts of violence as well as unstable personal, marital, and societal relationships.

From a large diverse cross-sectional population sample (n = 36,309), interviewers used a National Institute on Alcohol Abuse and Alcoholism tool known as Alcohol Use Disorder and Associated Disabilities Interview Schedule-5. This tool helps researchers identify not only alcohol misuse, but also drug use disorders, mood disorders, anxiety, and personality disorders.

This survey found that 4.3% of adults fulfilled criteria for antisocial personality disorder. Rates were highest in younger adult white and Native American males.

Treatments for antisocial personality disorder are labor intensive. Antisocial personality disorder tends to remit over time.

Whether treatment for the numerous other comorbidities, such as substance abuse associated with antisocial personality disorder, will hasten time to remission is an area of needed research. ■

Atopic Dermatitis Associated with Autoimmune Disorders

SOURCE: Andersen YM, Egeberg A, Gislason GH, et al. Autoimmune diseases in adults with atopic dermatitis. *J Am Acad Dermatol* 2017;76:274-280.

Atopic dermatitis has been viewed as a disorder of immune regulation primarily involving T-helper cells. The common association between atopic dermatitis, asthma, and allergic rhinitis supports the concept of shared immu-

nologic abnormalities. But the list of autoimmune disorders linked with atopic dermatitis has expanded to include vitiligo, alopecia, lupus, and inflammatory bowel disease.

The Danish National Patient Registry provides a window of observation into the association of atopic dermatitis with other autoimmune disorders. All Danes receive lifetime universal health insurance, and the registries represent both inpatient and outpatient data.

Based on hospital discharge diagnoses of atopic dermatitis (n = 8,112) in the 1997-2012 interval, an association of atopic dermatitis was found with autoimmune disorders as well as urticaria, celiac disease, Sjogren's syndrome, ankylosing spondylitis, and rheumatoid arthritis. These associations were stronger among smokers.

Of course, association does not prove causation. Hopefully, the immunologic links between these disorders will provide keys to their successful management. ■

Sickle Cell Trait Falsely Lowers Hemoglobin A1c

SOURCE: Lacy ME, Wellenius GA, Sumner AE, et al. Association of sickle cell trait with hemoglobin A1c in African Americans. *JAMA* 2017;317:507-515.

The recent endorsement of A1c measurements for the diagnosis of diabetes (and prediabetes) has engendered an increasingly frequent diagnosis of both disorders in symptomatic and asymptomatic individuals.

A1c accurately reflects the average exposure of hemoglobin in red blood cells to glucose over the prior 90 days.

However, if red blood cell life is shortened — as in hemoglobin S, hemoglobin C, thalassemia, hemolytic anemia, sickle cell disease, and others — there is insufficient red blood cell lifespan for full glycosylation to occur, resulting in a reduced A1c level that does not accurately reflect long-term ambient glucose exposure. Might sickle cell trait affect A1c?

Lacy et al performed a retrospective cohort study from a sample of adults (n = 4,620) that included both A1c and

plasma glucose levels. They found that the presence of prediabetes and diabetes was underestimated substantially when A1c was the diagnostic tool in persons with sickle cell trait.

The presence of sickle cell trait appears to lead to lesser levels of hemoglobin glycosylation than occurs in control subjects. The mechanism for this effect is controversial, but may reflect reduced red blood cell lifespan.

Clinicians may wish to include additional diagnostic tests for diabetes in persons with sickle cell trait, such as fasting glucose, postprandial glucose, or oral glucose tolerance testing. ■

Hate Traffic? You Might Be Forgetting Something

SOURCE: Chen H, Kwong JC, Copes R, et al. Living near major roads and the incidence of dementia, Parkinson's disease, and multiple sclerosis: A population-based cohort study. *Lancet* 2017;389:718-726.

As we search for remediable explanations for Alzheimer's disease and other dementias, several epidemiologically intriguing potential culprits have emerged, including air pollution and diesel exhaust. Although such pollutants have been shown to increase neuro-inflammation and oxidative stress, neither of these effects is sufficient evidence to definitively convict them.

Chen et al performed an analysis of new onset dementia cases (n = 243,611) in Canada to determine whether there was an association between how close one lives to a highway and incident dementia.

The adjusted hazard ratio indicated a slight increased risk for new onset dementia in people who lived < 50 meters from a major road (hazard ratio, 1.07) and a smaller, but still significant, increased risk among persons who lived 50-100 meters away (hazard ratio, 1.04). The relationship was strongest for persons who lived in major cities and lived in the same site long term.

Although it's unlikely anyone anticipates that these 4-7% relative risk increases are dominant factors in the development of dementia, perhaps they can provide mechanistic clues to the disease. ■

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