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What's inside ?

Introduction to diabetes 1

Diabetes is a chronic illness that lasts a lifetime.
Approximately 18.2 million Americans have the condition, with nearly a third (5.2 million) having no idea they had it.
Prediabetes affects an additional 41 million people
There is currently no cure.
Diabetes patients must keep track of their condition in order to stay healthy

Diabetes is a group of disorders characterised by issues with the insulin hormone. Normally, the pancreas releases insulin to assist your body in storing and using sugar and fat from diet.

Guidelines update for diabetes 2021 2

The latest comprehensive, evidence based recommendations for the diagnosis and treatment of children and adults with type 1, type 2, or gestational diabetes; strategies for the prevention or delay of type 2 diabetes; and therapeutic approaches that can reduce complications, mitigate cardiovascular and renal risk, and improve health outcomes are all included in the Standards of Medical Care in Diabetes—2021.

This update contains the following information:

Evidence for diabetes treatment for persons with chronic renal disease and heart failure is changing;
The use of technology for diabetes management and tailored treatment as well as therapy-based recommendations for continuous glucose monitoring (CGM) for diabetics;
Important diabetes related information on social determinants of health;
Barriers to diabetes self-management education and support (DSMES) and key moments;

Vaccine-specific updates, including COVID-19-related information.

The Standards of Care are now available online as a supplement to the January 2021 issue of the Journal of the American Medical Association.

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What is Diabetes Care®?

Diabetes Care is the highest-ranked, peer-reviewed publication in the field of diabetes treatment and prevention, published monthly by the American Diabetes Association (ADA).

The journal publishes original articles on human studies in clinical care, education, and nutrition; epidemiology, health services, and psychosocial research; emerging treatments and technologies; and pathophysiology and complications, all with the goal of increasing knowledge, stimulating research, and promoting better health care for people with diabetes.

The ADA's guidelines and declarations, as well as therapeutically important review papers, editorials, and comments, are all published in Diabetes Care.

Clinically oriented physicians, researchers, epidemiologists, psychologists, diabetes care and education specialists, and other health care professionals will be interested in the topics presented.

FDA announcement for diabetes 2021 3

Wegovy (semaglutide) injection (2.4 mg once weekly) was approved by the US Food and Drug Administration today for chronic weight management in adults with obesity or overweight who have at least one weight-related condition (such as high blood pressure, type 2 diabetes, or high cholesterol), in addition to a reduced calorie diet and increased physical activity.

Since 2014, this under-the-skin injection has been licenced as the first medicine for chronic weight management in individuals with general obesity or overweight.

Individuals with a BMI of 27 kg/m2 or above who have at least one weight-related disease, or patients with a BMI of 30 kg/m2 or greater, are prescribed the medicine for chronic weight management.

"Today's approval provides adults with obesity or overweight a valuable additional therapy option to include in a weight-loss regimen," said John Sharretts, M.D., deputy director of the Division of Diabetes, Lipids, and Nutrition.

Around 70% of adults in the United States are obese or overweight.

Obesity or being overweight is a major health problem linked to some of the main causes of mortality, such as heart disease, stroke, and diabetes, as well as an increased risk of some cancers.

In adult individuals with obesity or overweight, losing 5% to 10% of body weight with diet and exercise has been linked to a lower risk of cardiovascular disease.

Wegovy works by simulating the hormone glucagon-like peptide-1 (GLP-1) which regulates hunger and food intake in the brain.

To reduce gastrointestinal adverse effects , the medicine dose must be gradually increased over 16 to 20 weeks to 2.4 mg once weekly.

Other semaglutide-containing products, other GLP-1 receptor agonists, or other weight-loss treatments, including prescription medications, over-the-counter drugs, or herbal remedies, should not be taken with Wegovy.

There hasn't been any research done on Wegovy.

FDA announcement for diabetes 2021

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n four 68-week trials, the safety and efficacy of Wegovy were investigated.
Three of the trials were randomised, double-blind, placebo-
controlled trials (including 16 weeks of dose increases), and one was a randomised, double-blind, placebo-
controlled, randomised withdrawal trial in which patients receiving Wegovy were given the option of continuing treatment or switching to a placebo.
In these four investigations, almost 2,600 patients received Wegovy for up to 68 weeks, while over 1,500 patients received placebo.

Adults without diabetes were enrolled in the largest placebo-controlled experiment.
The average age of the patients at the start of the trial was 46, and 74% of them were female.
The average BMI was 38 kg/m2 and the average body weight was 231 pounds (105 kg).
When compared to those who received placebo, those who received Wegovy dropped an average of 12.4 percent of their initial body weight.
Adults with type 2 diabetes were included in another study.
The average age was 55, and 51% of the participants were female.
The average BMI was 36 kg/m2 and the average body weight was 220 pounds (100 kg).
Individuals who got Wegovy dropped 6.2 percent of their baseline body weight in this study when
compared to those who received placebo.

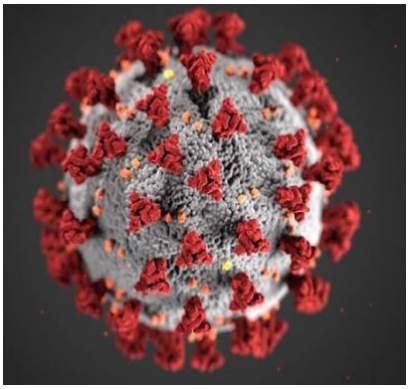
Nausea, diarrhoea, vomiting, constipation, abdominal (stomach) discomfort, headache, fatigue,
dyspepsia (indigestion), dizziness, abdominal distension, eructation (belching), hypoglycemia
(low blood sugar) in patients with type 2 diabetes, and flatulence (gas) are the most common adverse effects of Wegovy.

Patients having a history of severe allergic responses to semaglutide or any of the other components of Wegovy should avoid using it.
If a serious allergic response is detected, patients should stop taking Wegovy immediately and seek medical care.
Wegovy also has warnings for pancreatitis, gallbladder problems (including gallstones), low blood sugar, acute renal injury, diabetic retinopathy (eye retina damage), elevated heart rate, and suicidal behaviour or thinking.
If a patient is experiencing symptoms of pancreatitis or gallstones, they should speak with their doctor.
Patients who take Wegovy with insulin or a chemical that stimulates insulin secretion should talk to their doctor about lowering the amount of insulin or the insulin-inducing medicine to lessen the risk of low blood sugar.
Patients with kidney disease, diabetic retinopathy, depression, or suicidal conduct or thoughts should be closely monitored by healthcare providers.

Related Information

The FDA, an agency within the U.S. Department of Health and Human Services, protects the public health by assuring the safety, effectiveness, and security of human and veterinary drugs, vaccines and other biological products for human use, and medical devices. The agency also is responsible for the safety and security of our nation's food supply, cosmetics, dietary supplements, products that give off electronic radiation, and for regulating tobacco products.

Strong Correlation Between Prevalence of SevereVitamin D Deficiency and Population Mortality Rate from COVID-19 in Europe 4



Description :

The Vitamin D and COVID19 Trial (VIVID) is a randomised clinical trial involving 2700 men and women from across the United States to see if taking a daily dietary supplement of vitamin D for four weeks reduces disease severity in people newly diagnosed with COVID19 and reduces the risk of infection with severe acute respiratory syndrome coronavirus 2 , SARS-CoV2 in people who live with someone newly diagnosed with COVID-19

Condition or disease	Intervention/treatment	Phase
COVID-19	Dietary Supplement: vitamin DDietary Supplement: Placebo	Phase 3

Study Type :	Interventional (Clinical Trial)
Estimated Enrollment :	2700 participants
Allocation:	Randomized
Intervention Model:	Parallel Assignment
Masking:	Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)
Primary Purpose:	Treatment
Official Title:	A Cluster-Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy of Vitamin D3 Supplementation to Reduce Disease Severity in Persons With Newly Diagnosed COVID-19 Infection and to Prevent Infection in Household Members
Actual Study Start Date :	December 28, 2020
Estimated Primary Completion Date :	December 31, 2021
Estimated Study Completion Date :	December 31, 2021

Arm	Intervention/treatment
Active Comparator: Vitamin D Daily vitamin D3 (9600 IU/day on days 1 and 2; 3200 IU/day on days 3 through 28)	Dietary Supplement: vitamin D Vitamin D softgel capsules; each capsule contains 3200 IU of vitamin D3. Three capsules per day (9600 IU/day) will be taken on days 1 and 2, and one capsule per day (3200 IU/day) will be taken on days 3 through 28 Other Names: • vitamin D3 • cholecalciferol
Placebo Comparator: Placebo Placebo	Dietary Supplement: Placebo Placebo softgel capsules. Three capsules per day will be taken on days 1 and 2, and one capsule per day will be taken on days 3 through 28

Primary outcome measures :

Rate of seeking healthcare for symptoms or concerns linked to COVID19 (including hospitalizations, emergency department visits, or ambulatory or virtual clinician visits) or deaths in persons newly diagnosed with COVID-19 (index cases)
[Duration: 4 weeks]

Measures of Secondary Outcomes:

Among index cases, the rate of hospitalization/death or emergency department visits associated to COVID-19 infection was high.
[Duration: 4 weeks]
In index cases with a high risk of illness development, the rate of hospitalization/death or emergency room visits associated to COVID-19 was high (defined as age 50 or older, or age 18-49 with at least one co-morbidity or risk factor)
[Duration: 4 weeks]

In index cases, self-reported illness severity
[Duration: 4 weeks]

1 indicates no COVID-19 illness; 2 indicates COVID-19 illness without hospitalisation; 3 indicates COVID-19 illness with hospitalisation; and 4 indicates death.

In index instances, time to seek medical attention (including hospitalizations, emergenc clinician visits) or death
[Duration: 4 weeks]

In index cases, ICU admission/ventilation support is required. [Duration: 4 weeks]

Infection with SARS-CoV-2 in close household contacts [Duration: 4 weeks]

Other positive tests, such as seroconversion
Household contacts' self-reported disease severity and time to symptom onset [Time Frame : 4 weeks]

1 indicates no COVID-19 illness; 2 indicates COVID-19 illness without hospitalisation; 3 indicates COVID-19 illness with hospitalisation; and 4 indicates death.

Symptoms or concerns related to COVID-19 infection or deaths among household contacts who contract COVID-19
[Time Frame: 4 weeks] Rate of healthcare visits (including hospitalizations, emergency room visits, ambulatory or other clinician visits) for symptoms or concerns related to COVID-19 infection or deaths among household contacts who contract COVID-19

Egyptian healthcare update

for diabetes 2021 5

T2DM is a public health concern that is widespread, serious, and developing among the elderly, with serious consequences for their heal th and well-being.
SOC and resourcefulness are significant resources that can empower a person
and increase their ability to manage various life obstacles, including the burden of a chronic disease, in a health-promoting manner.
Determine the association between senior individuals with diabetes mellitus's
sense of coherence, resourcefulness, and functional health status.

Geriatric medicine clinic, general medical clinic, diabetic clinic, cardiova scular
clinic, and nephrology clinic are among the five outpatient clinics at The Main University Hospital in Alexandria.
Alexandria is a city in Egypt.
The participants were 120 senior individuals aged 60 and up who were diagnosed with T2DM and had no or mild cognitive impairment.
To collect data, five instruments were used: a short portable mental state

Questionnaire, a sociodemographic questionnaire, and a demographic questionnaire and clinical data from geriatric patients with diabetes mellitus, including structured interview schedules, sense of coherence scales, resourcefulness scales, and Dartmouth Primary Care Cooperative Information Project/World Organization of National Colleges, Academies, and Academic Associations of General Practice /Family Physicians (COOP/WONCA) charts.

Results:
The findings demonstrated a statistically significant association between SOC, overall resourcefulness, and all of the functional health status scores of the study older individuals, with higher levels of SOC and resourcefulness related with improved functional health status among the participants.
Conclusion: There was a statistically significant association between SOC, total resourcefulness, and all of the research older people' functional health status ratings, as higher levels of SOC and resourcefulness were related with improved functional health status among the study participants.

How to be a professional pharmacist

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Expertise in medications and medication-use

• Pharmacists maintain their competence.

• Pharmacists apply their medication and medication-use expertise while performing their daily activities.

• Pharmacists provide evidence of application of their medication and medication-use expertise through documentation.

Collaboration

• Pharmacists work constructively with students, peers and members of the inter-professional team.

• Pharmacists communicate effectively.

Safety and Quality

• Pharmacists undertake continuing professional development, quality assurance and quality improvement.

• Pharmacists respond to safety risks.

Professionalism and Ethics

• Pharmacists demonstrate professionalism and apply ethical principles in their daily work.

Expertise in medications and medication-use

• Pharmacists maintain their competence

• Pharmacists apply their medication and medication-use expertise while performing their daily activities.

Model Standards of Practice (MSOP)

MSOP required of pharmacists regardless of the role they are fulfilling

MSOP required of pharmacists when providing patient care

MSOP required of pharmacists when providing drug information

MSOP required of pharmacists when responsible for drug distribution

MSOP required of pharmacists when managing a pharmacy

MSOP required of pharmacists when educating pharmacy students

1. **Introduction to diabetes :** https://www.ncbi.nlm.nih.gov/books/NBK1671/
2. **Guideline update 2021 :** https://reference.medscape.com/latest-clinical-guidelines https://www.diabetes.org/newsroom/press-releases/2020/ADA-releases-2021-standards-of-medical-care-in-diabetes
3. **FDA announcement 2021 :** https://www.fda.gov/news-events/press-announcements/fda-approves-first-interchangeable-biosimilar-insulin-product-treatment-diabetes
4. **Covid 19 and vitamin D :** https://clinicaltrials.gov/ct2/show/NCT04536298
5. **Egyptian healthcare update 2021 :** https://ejhc.journals.ekb.eg
6. **How to be professional pharmacist :** https://napra.ca/sites/default/files/2017-09/Model_Standards_of_Prac_for_Cdn_Pharm_March09_layout2017_Final.pdf

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PFIZER AND BIONTECH ANNOUNCE VACCINE CANDIDATE AGAINST COVID-19 ACHIEVED SUCCESS IN FIRST INTERIM ANALYSIS FROM PHASE 3 STUDY

Vaccine candidate was found to be more than 90% effective in preventing COVID-19 in participants without evidence of prior SARS-CoV-2 infection in the first interim efficacy analysis

Analysis evaluated 94 confirmed cases of COVID-19 in trial participants

Study enrolled 43,538 participants, with 42% having diverse backgrounds, and no serious safety concerns have been observed; Safety and additional efficacy data continue to be collected

Submission for Emergency Use Authorization (EUA) to the U.S. Food and Drug Administration (FDA) planned for soon after the required safety milestone is achieved, which is currently expected to occur in the third week of November

Clinical trial to continue through to final analysis at 164 confirmed cases in order to collect further data and characterize the vaccine candidate's performance against other study endpoints

This press release features multimedia

View the full release here : https://www.businesswire.com/news/home/20201109005539/en/