Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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in 57.6% of patients, with a positive result in 52.5% (529) of them. A computed tomography (CT) scan was performed in 92.8% (935) of patients and identified signs consistent with covid-19 pneumonia in 86.7% of patients, of which 35.1% had a damage of 10-25%. The most frequent inaugural symptoms were asthma (71.6%) and cough (56.1%). The most frequent complication was the diagnosis of diabetes in 37 patients (3.7%), followed by dehydration in 26 patients (2.6%). Severe forms (CT damage > 50% and/or oxygen therapy) represented 10.7% of the cases. The average hospital stay was of 10 days. A total of 15 patients were admitted to the intensive care unit following an acute respiratory distress syndrome (ARDS), i.e., a prevalence of 1.5%, and 10 deaths were recorded, giving a case fatality rate of 1.0%.

Conclusions: This study showed that a small proportion of COVID-19 patients were admitted to the ICU and the case fatality rate is similar to what has been observed worldwide.

EPH42 PATIENT FACTORS ASSOCIATED WITH THE USE OF SECOND-GENERATION ANTIDIABETIC MEDICATIONS AMONG PATIENTS WITH TYPE 2 DIABETES

Brooks L,1 Y Li,2 Zheng J,3 Qian J1
1Auburn University, Harrison School of Pharmacy, Auburn, AL, USA, 2Auburn University College of Sciences and Mathematics, Auburn, AL, USA

Objectives: Second-generation antidiabetic medications (including glucagon-like peptide-1 [GLP-1] receptor agonists, dipeptidyl peptidase 4 [DPP-4] inhibitors, and sodium-glucose co-transporter-2 [SGLT2] inhibitors) have been shown beyond-anti-hyperglycemic effects in randomized controlled trials. However, how these medications were prescribed in practice is unknown. This study assessed patient factors associated with the use of medications in a nationally representative sample of patients with type 2 diabetes.

Methods: This retrospective, cross-sectional analysis used the 2005-2018 National Health and Nutrition Examination Survey (NHANES) data. Survey participants 18 years and older, who were diagnosed with diabetes or ever told having diabetes and have taken any antidiabetic medication in the last 30 days were included. Patient factors with potential type 2 diabetes, pregnant women, or with non-positive NHANES survey weights were excluded. The primary outcome was the prescription of any second-generation antidiabetic medication. Weighted stepwise multiple logistic regression models were conducted to assess the associations between use of second-generation antidiabetic medications and patient's demographics, socioeconomic, access to care, health behaviors, diabetes-related factors, and comorbidities (SAS 9.4 (Cary, NC)).

Results: Among a total of 4,493 (weighted n=19,029,829) type 2 diabetic patients, 532 (weighted n=33,676) reported using one of six second generation antidiabetic drugs. DPP-4 inhibitors were the most commonly prescribed drug class (n=400, weighted n=70,662). In multivariable analyses, patients with income of ≥400% poverty level (adjusted odds ratio [AOR] =2.30, 95% confidence interval [CI]=1.58, 3.34), higher body mass index (AOR=1.10, 95% CI=1.02, 1.18) and taking more medications (AOR=1.14, 95% CI=[1.09, 1.20]) were more likely to use second-generation antidiabetic drugs compared to their counterparts.

Conclusions: We found that the uptake of second-generation antidiabetic medications was low among patients with type 2 diabetes in the United States. Prescription of these drugs requires health insurance coverage. Payment for these new drugs may improve patient access and clinical outcomes for patients with type 2 diabetes.

EPH43 IMPACT OF COVID-19 PANDEMPC ON CANCER PREVENTIVE SCREENING

Weeraratne D,1 Tajmame A,1 Patel M,1 Rosario B1
1IBM Watson Health, Cambridge, MA, USA,2IBM Watson Health, Forest City, CA, USA,3IBM Watson Health, Cleveland, OH, USA,4IBM Watson Health, Round Rock, TX, USA

Objectives: Cancer screening tests aim to detect specific types of cancer at an early stage in asymptomatic patients, which can increase the likelihood of successful treatment. The COVID-19 pandemic which triggered reallocation of healthcare resources, stay-at-home orders, lockdowns, and patient hesitancy to seek care may have impacted routine cancer screening. The goal of the study was to analyze a large-scale prospective cohort of insurance claims data to quantify 9-month screening rates for breast, prostate, and colorectal cancers before and during the COVID-19 pandemic.

Methods: This retrospective observational study utilized data from IBM MarketScan Commercial Research Databases, and the IBM MarketScan Dental Database using International Classification of Diseases (ICD) diagnosis code U07.1. Demographic information was measured on the date of Covid-19 diagnosis. Covid-19-related hospitalizations were identified in the 3 months following diagnosis. Diagnosis of gingivitis or periodontitis (International Classification of Diseases, 10th revision code K05) and baseline clinical characteristics were measured in the year prior to Covid-19 diagnosis. The MarketScan Commercial and Medicare Research Databases provide detailed cost, use, and outcomes data for insured U.S. patients.

Results: Of the 1,813 eligible patients, 122 (6.73%) experienced a fall during opioid therapy and 232 (12.80%) had concurrent use of gabapentin on their index date. Concurrent use of opioids and gabapentin significantly increased the risk of falling (AOR=1.73; 95% CI: 1.08-2.78) compared to opioid monotherapy. Females (AOR=1.56; 95%CI:1.01-2.42), those at least 81 years old (AOR=2.70; 95%CI:1.62-4.50), and those with a higher number of chronic conditions had a higher risk of falling (AOR=1.27; 95%CI:1.15-1.41).

Conclusions: Older patients who were prescribed gabapentin and opioids concurrently had a significantly higher risk of falling compared to patients on opioid monotherapy. Providers should avoid the concurrent use of gabapentin and opioids in this patient population.

EPH45 THE IMPACT OF GINGIVITIS AND PERIODONTITIS ON COVID-19 OUTCOMES: A CASE-CONTROL STUDY

Morrow C,1 McKenna RM,2 Gebauer E,2 Palmer L2
1IBM Watson Health, Traverse City, MI, USA,2IBM Watson Health, Cambridge, MA, USA

Objective: To measure the association between gingivitis or periodontitis and Covid-19-associated hospitalization in a large sample of Medicare and commercially insured U.S. patients. Methods: All patients with a Covid-19 diagnosis between March 2020 and January 2021 were identified in the IBM MarketScan Medicare and Commercial Research Databases, and the IBM MarketScan Dental Database using International Classification of Diseases (ICD) diagnosis code U07.1. Demographic information was measured on the date of Covid-19 diagnosis. Covid-19-related hospitalizations were identified in the 3 months following diagnosis. Diagnosis of gingivitis or periodontitis (International Classification of Diseases, 10th revision code K05) and baseline clinical characteristics were measured in the year prior to Covid-19 diagnosis. The MarketScan Commercial and Medicare Research Databases provide detailed cost, use, and outcomes data for healthcare services. The Dental Research Database contains dental coverage enrollment, dental plan types, provider types, diagnoses, and tooth-specific services rendered. Results: 786,238 patients (743,987 Commercial and 42,251 Medicare) were diagnosed with Covid-19 during the study period. Forty-six percent were male, and 90% were above the age of 18, with a mean age of 40. Within 3 months of Covid-19 diagnosis, 55,685 (7%) had a Covid-19-related hospitalization. Among them, 47 (0.1%) had a gingivitis and/or periodontitis diagnosis before Covid-19 diagnosis. Gingivitis/periodontitis was associated with Covid-19-related hospitalization for the sample overall, the Commercial subset, and the Medicare subset (odds ratio=1.5, 1.6, 1.2, respectively). Conclusions: In an unadjusted case-control study of commercially insured and Medicare patients, an association between gingivitis/periodontitis and severity of Covid-19 was identified. This confirms a hypothesized association put forth early in the pandemic and similar relationships found in electronic health record data. Further research should explore mitigating economic factors and baseline respiratory-related clinical characteristics.

EPH46 CHANGE IN PERSISTENCE BETWEEN BIOLOGIC AND BIOSIMILAR OF INFLIXIMAB IN THE US

Bhal S1, Roy A1, Chopra A1, Gupta A1, Brooks L1, Sulzicki M1, Verma V1, Pandey S1, Field S1, Krebs B1
1Optum Global Solutions, UNG, New Delhi, India, 2Optum Global Solutions, India, Gurugram, HR, India, 3Optum, Gurugram, HR, India, 4Optum Global Solutions, India, New Delhi, IN, 5Optum, Gurgaon, HR, India, 6Optum, Eden Prairie, MN, USA, 7Optum, Basking Ridge, NJ, USA, 8Optum, Trumbull, CT, USA, 9Optum Global Solutions, India, Gurugram, HR, India, 10Optum, Dallas, TX, USA, 11Optum, Tucson, AZ, USA

Objective: Infliximab is a biologic drug administered in medical setting and has biosimilars like Infliximab-dyyb and Infliximab-abda are used in the US for the treatment of multiple diseases like rheumatoid arthritis, plaque psoriasis, ulcerative