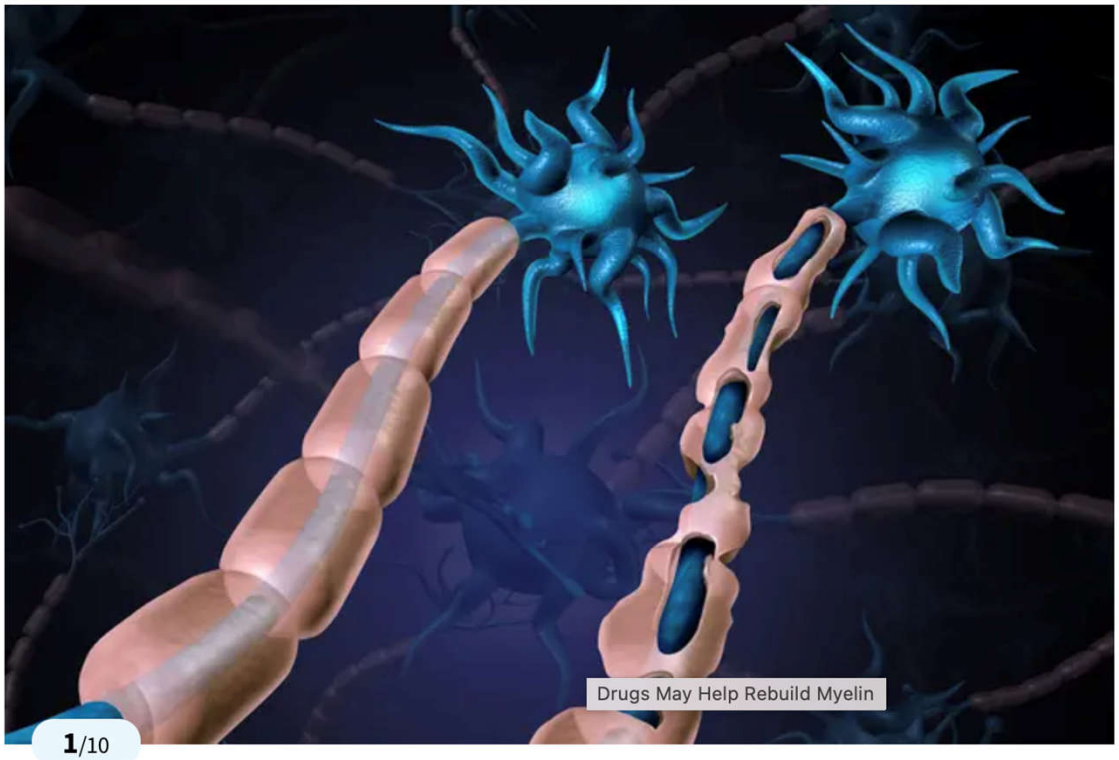
Internet news

Phòng Khám TMH

Advances in Treatment of Multiple Sclerosis

Medically Reviewed by Melinda Ratini, MS, DO on November 14, 2022



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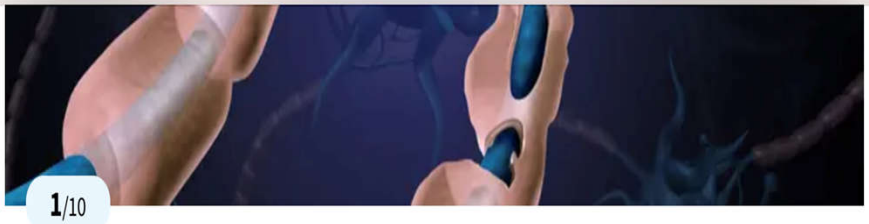
Drugs May Help Rebuild Myelin

Two drugs, metformin (Fortamet, Glucophage, Glumetza, Riomet) and clemastine (Dayhist, Tavist), may help rebuild your myelin. Usually,



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Drugs May Help Rebuild Myelin

Two drugs, metformin (Fortamet, Glucophage, Glumetza, Riomet) and clemastine (Dayhist, Tavist), may help rebuild your myelin. Usually, metformin treats diabetes and clemastine helps with hay fever. Researchers found metformin can help myelin-making cells repair it better. Experts found clemastine helped with the speed of messages from your eye to your brain. Animal studies showed metformin can improve the effect of clemastine.

More research is needed about the effects on humans.

3/10

BTK Blockers May Lessen Nerve Damage

Bruton's tyrosine kinase (BTK) plays a role in the survival of B cells, white blood cells that make antibodies. Some B cells are linked to MS relapses and progression because they attack myelin. BTK inhibitors (BTKis) target B cells that can do damage while leaving useful B cells alone. BTKis were first used to treat cancer. Now scientists are studying some BTKis – evobrutinib, fenebrutinib, orelabrutinib, and tolebrutinib – in clinical trials to find out how effective they are against MS.

Pioglitazone May Prevent Myelin Damage

Experts are doing clinical trials with pioglitazone (Actos), a diabetes medication, in people with progressive MS. They want to see whether the drug can target immune system attacks on myelin. Pioglitazone may be a useful therapy to protect nerve fibers from more damage and even repair damage to myelin.

ATA188 Targets EBV, May Help MS

This therapy targets Epstein-Barr virus (EBV), which is believed to play a role in how likely you are to get MS. ATA188 involves T cells (white blood cells in the immune system) that target and kill cells infected with EBV. Experts are studying the proper dosages, safety, and success of this intravenous (IV) infusion and how it can help treat progressive MS.

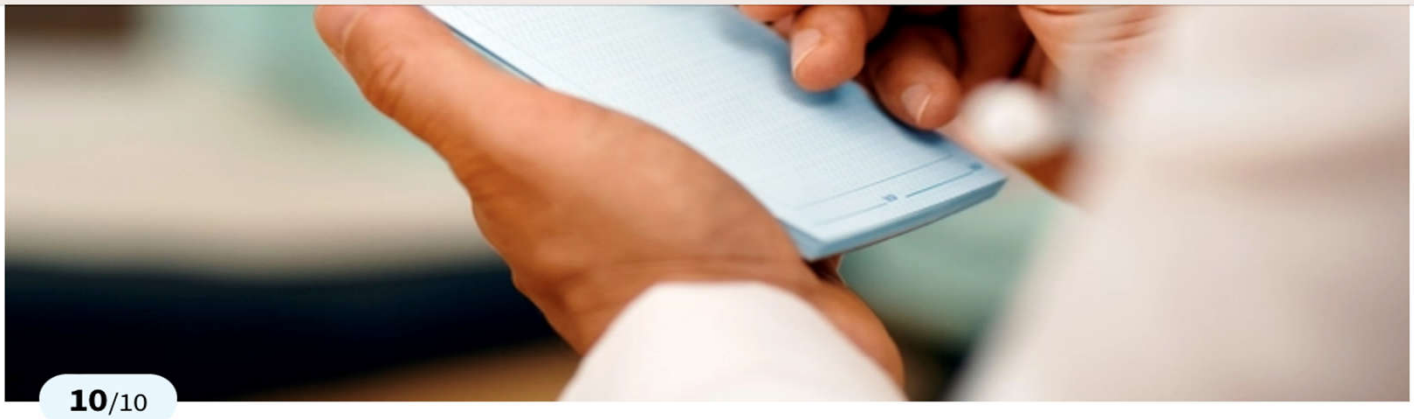
dilast Can Slow Brain inkage

st (MN-166) is an anti-inflammatory drug that lowers the action of me called phosphodiesterase. Blocking the enzyme can lessen nation and promote nerve growth. Ibudilast can't stop new MS But it can slow brain shrinkage and stop some immune system that can lead to nerve damage. Researchers also found that st appears to help treat slowly evolving lesions (SELs) in people ogressive MS.

DMTs Can Change the Course of MS

Disease-modifying therapies (DMTs) can help decrease your MS symptoms. The FDA has approved new ones to treat and manage MS:

- Diroximel fumarate (Vumerity) lessens inflammation and stops nerve damage that may cause MS symptoms.
- Fingolimod (Gilenya) reduces the MS relapse rate in adults and children. It's the first FDA-approved MS drug for kids.
- Ofatumumab (Kesimpta) is an injectable drug that can prevent MS symptoms from coming back and slow down disability in people with MS.



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Cholesterol Drugs May Help With MS

Simvastatin (Flolipid, Zocor) is a statin doctors prescribe to treat high cholesterol. It may also help slow down secondary progressive MS. Some studies show that higher cholesterol levels are linked to worsened MS. Because of this, experts thought simvastatin might slow down MS progression if it lowers your cholesterol. But a more recent study found that the drug directly slows down the progression of MS, even if it doesn't help your cholesterol levels.

Association of Backscattered Ultrasonographic Imaging of the Tongue With Severity of Obstructive Sleep Apnea in Adults

Stanley Y. C. Liu, MD, DDS[1]; Pien F. N. Bosschieter, MD, PhD[1]; Mohammed Abdelwahab, MD, PhD[1,2]; et al

» Author Affiliations | Article Information

JAMA Otolaryngol Head Neck Surg. Published online May 11, 2023. doi:10.1001/jamaoto.2023.0589

Key Points

Question Using standardized backscattered ultrasonographic imaging (BUI) analysis, do upper airway tissue characteristics correlate with severity of obstructive sleep apnea (OSA)?

Results In this prospective, single-center, diagnostic study of 89 adult patients, BUI analysis demonstrated a strong association between the severity of OSA and

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Comment

Top of Article

- Key Points
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Conclusion
- Article Information
- References

Abstract

Importance Determining interventions to manage obstructive sleep apnea (OSA) depends on clinical examination, polysomnography (PSG) results, and imaging analysis. There remains the need of a noninvasive and cost-effective way to correlate relevant upper airway anatomy with severity of OSA to direct treatment and optimize outcome.

Objective To determine whether backscattered ultrasonographic imaging (BUI) analysis of the tongue is associated with severity of OSA in adults.

Design, Setting, and Participants In this prospective, single-center, diagnostic study of a consecutive series of patients (aged ≥18 years) at a sleep surgery clinic, the 89 included patients had a PSG within 3 years at the time of ultrasonography and BUI analysis between July 2020 and March 2022. Patients were excluded if body mass index had changed more than 10% since time of PSG. A standardized submental ultrasonographic scan with laser alignment was used with B-mode and BUI analysis applied to the tongue. The B-mode and BUI intensity were associated with the apnea-hypopnea index (AHI), a measure of severity of apnea from normal (no OSA) to severe OSA.

Exposures Ultrasonography and PSG.

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Comment

Top of Article

- Key Points
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Conclusion
- Article Information
- References

nority of participants underwent home sleep study, which tends to underestimate severity of OSA as compared with attended PSG. Nevertheless, to our knowledge, this is the most diverse population of adult patients with OSA that have been examined with ultrasound technology to date. Analysis of trends also show that home sleep study does underestimate BUI, hence in an expected direction. Future research with a larger study population, balanced proportions of sex and race, and examination of other upper airway muscles implicated in OSA pathogenesis will likely yield improvement in prognostic value using quantitative ultrasound technology. Subsequently, the potential role of using BUI to screen for surgical eligibility will be an exciting addition in the era of preservation pharyngoplasty, patient-specific maxillomandibular advancement, and hypoglossal nerve stimulation.[46-50]

Conclusion

Standardized ultrasonography of the tongue with backscattered imaging analysis yields strong correlation with clinical severity of OSA. With the advantages associated with noninvasiveness and cost in the use of ultrasonography, this analysis is pivotal in reducing the gap between anatomy and physiology in clinical decision-making for OSA treatment.

Article Information

Back to top

Download PDF
Comment

Top of Article

- Key Points
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Conclusion
- Article Information

h Information

eight Loss, Alzheimer's May Be ontier for Drugs Like Ozempic

REUTERS

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DON (Reuters) - Diabetes drugs that also promote weight loss such as o Nordisk's Ozempic, becoming a darling of celebrities and investors, are g studied to tackle some of the most difficult-to-treat brain disorders, uding Alzheimer's disease.

etes regimens, from Ozempic to old mainstays like insulin and metformin, ear to address several different aspects of the metabolic system implicated zheimer's disease, including a protein called amyloid and inflammation, archers say.

hope is that improving glucose utilisation and tamping down inflammation e entire body - including the brain - could slow progression of debilitating ases like Alzheimer's and Parkinson's.

eral scientists interviewed by Reuters pointed to mounting research porting testing diabetes drugs against neurodegenerative diseases.

ults are years away and success uncertain. But interest has been buoyed

amyloid plaques accumulated in the brain can slow cognition decline caused by the fatal mind-wasting disease.

Those successes followed decades of futility that had left many questioning the validity of the amyloid theory behind most experimental Alzheimer's drugs.

Dr. Suzanne Craft, professor of gerontology and geriatric medicine at Wake Forest University School of Medicine, gave a keynote speech at an influential Alzheimer's scientific meeting late last year about the need to test treatments such as diabetes drugs to further reduce the advance of Alzheimer's.

She said she has since been approached by pharmaceutical companies at an increasing pace, and is currently running an Alzheimer's trial evaluating intranasal insulin in combination with another diabetes drug.

Diabetes treatments may amplify the clinical benefit of anti-amyloid drugs, and potentially lead to complete stabilization or even some recovery in Alzheimer's patients, Craft said.

"This is what these agents do, and what insulin does. It plays a role in regeneration. And that's what needs to happen. Given its role in modulating immune function, it may prevent the amyloid from continuing to accumulate," Craft surmised.

Unlike older off-patent medicines like metformin, there is commercial incentive to test newer treatments such as GLP-1 agonists, a rapidly expanding class now dominated by Ozempic, known chemically as semaglutide, and Lilly's Mounjaro, with other players working on a dozen potential new treatments.

Intranasal Insulin for the Treatment of Persistent Post-COVID-19 Olfactory Dysfunction.

Giancarlo B Cherobin, Roberto E S Guimarães, Márcia C de Paula Gomes, Luís O G Vasconcelos, Lígia A N de Abreu

Otolaryngology - Head and Neck Surgery 2023 April 21

OBJECTIVE: To investigate if intranasal insulin could be a treatment option for those suffering from recalcitrant olfactory dysfunction due to COVID-19.

STUDY DESIGN: Prospective interventional cohort with a single group.

SETTING: Sixteen volunteers with anosmia, severe hyposmia, or moderate hyposmia for more than 60 days as sequelae of severe acute respiratory syndrome coronavirus 2 infections were selected for the study. All volunteers reported that standard therapies, such as corticosteroids, have failed to improve their olfactory function.

METHODS: Olfactory function was assessed by the Chemosensory Clinical Research Center test of olfaction (COT) before and after the intervention. Changes in qualitative, quantitative, and global COT scores were investigated. The insulin therapy session consisted of placing into each olfactory cleft 2 pieces of gelatin sponge soaked with neutral protamine Hagedorn (NPH) insulin, 40IU on each side. The procedure was repeated twice a week for 1 month. Glycaemic blood level was measured before and after each session.

RESULTS: The qualitative COT score rose 1.53 points, p=.0001, 95% confidence interval (CI) (-2.12 to -0.94). The quantitative

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RESULTS: The qualitative COT score rose 1.53 points, p=.0001, 95% confidence interval (CI) (-2.12 to -0.94). The quantitative COT score increased by 2.00 points, p=.0002, 95% CI (-3.59 to -1.41). Global COT score had an improvement of 2.01 points, p =.00003, 95% CI (-2.7 to -1.3). Glycaemic blood level dropped on average 10.4mg/dL, p<.00003, 95% CI (8.1-12.8).

CONCLUSION: Our results suggest that the administration of NPH insulin into the olfactory cleft yields a rapid improvement in the sense of smell of patients suffering from persistent post-COVID-19 olfactory dysfunction. Moreover, the procedure seems to be safe and tolerable.

Approval of albuterol-budesonide for asthma in the United States (January 2023)

RECENT APPROVALS - OTHER

New agents for the treatment of polymyalgia rheumatica (April 2023)

Fecal microbiota rectal suspension for preventing recurrent Clostridioides difficile infection (March 2023)

Dupilumab for eosinophilic esophagitis (January 2023)

Trial of intravenous immune globulin for dermatomyositis (November 2022)

COVID-19 MANAGEMENT

Tixagevimab-cilgavimab (Evusheld) no longer authorized for prevention of COVID-19 (January 2023)

Risk of severe COVID-19 in patients with asthma

New agents for the treatment of polymyalgia rheumatica (April 2023)

Patients with refractory polymyalgia rheumatica (PMR) are starting to have options beyond chronic glucocorticoid therapy.

- In a randomized trial of 118 patients with relapsing PMR, patients assigned to receive sarilumab, an IL-6 inhibitor, every two weeks had a higher rate of sustained remission than patients assigned to placebo (28 versus 10 percent) and were less likely to relapse once remission was achieved [56].
- In another study, patients who received a single infusion of rituximab, an anti-CD20 monoclonal antibody, in combination with a 17-week glucocorticoid taper were more likely to achieve steroid-free remission at 21 weeks and one year compared with those who received a steroid taper alone (47 versus 23 percent at one year) [57].

Sarilumab has recently been approved by the US Food and Drug Administration for the treatment of patients with PMR who cannot tolerate glucocorticoid taper [56]. Both drugs will require additional study before gaining widespread acceptance for this indication. (See "Treatment of polymyalgia rheumatica", section on 'Limited role for glucocorticoid-sparing therapies'.)