WebMD

YOUR VISIT

CHRONIC SINUSITIS -

WORKBOOK FEBRUARY 2021 Tools for today's appointment TRACK YOUR SYMPTOMS WITH A DAILY DIARY

TODAY'S VISIT

Use this guide to help make the most of your time with your doctor

QUESTIONS TO ASK IN THE EXAM ROOM

➤ Do I need allergy testing?						
➤ Should have	a CT scan of my sin	iuses?				
➤ Could an imm	une system problem be	causing my chronic sinus	sitis?			
►At what point	is surgery necessary	?				
➤ When should	I call you?					
➤ Treatments I've	tried:					
	WHAT TYPE AND DOSE/AMOUNT?	HOW WELL DID IT WORK?	DID YOU HAVE SIDE EFFECTS/PROBLEMS?			
MEDICATION						
OTHER TREATMENTS/ LIFESTYLE CHANGES						

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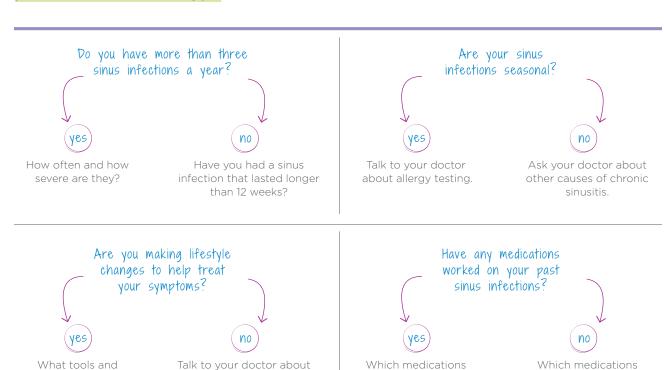
have you tried?

ASK YOURSELF

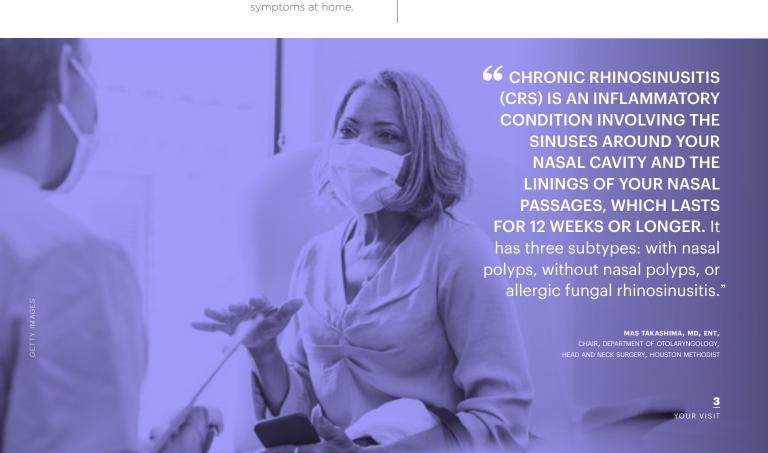
Answers to these questions can help your doctor better understand how your chronic sinusitis is affecting you

how you can soothe sinusitis

practices do you use?



were successful?





INDICATION

DUPIXENT is a prescription medicine used with other medicines for the maintenance treatment of chronic rhinosinusitis with nasal polyposis (CRSwNP) in adults whose disease is not controlled. It is not known if DUPIXENT is safe and effective in children with chronic rhinosinusitis with nasal polyposis under 18 years of age.

IMPORTANT SAFETY INFORMATION

Do not use if you are allergic to dupilumab or to any of the ingredients in DUPIXENT.

Before using DUPIXENT, tell your healthcare provider about all your medical conditions, including if you:

- have eye problems.
- have a parasitic (helminth) infection.
- are scheduled to receive any vaccinations. You should not receive a "live vaccine" if you are treated with DUPIXENT.
- are pregnant or plan to become pregnant. It is not known whether DUPIXENT will harm your unborn baby.
 There is a pregnancy exposure registry for women who take DUPIXENT during pregnancy to collect information about the health of you and your baby. Your healthcare provider can enroll you or you may enroll yourself. To get more information about the registry call 1-877-311-8972 or go to https://mothertobaby.org/ongoing-study/dupixent/.
- are breastfeeding or plan to breastfeed. It is not known whether DUPIXENT passes into your breast milk.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins and herbal supplements.

Especially tell your healthcare provider if you are taking oral, topical, or inhaled corticosteroid medicines or if you have CRSwNP and asthma and use an asthma medicine. **Do not** change or stop your corticosteroid medicine or other asthma medicine without talking to your healthcare provider. This may cause other symptoms that were controlled by the corticosteroid medicine or other asthma medicine to come back.

DUPIXENT can cause serious side effects, including:

- Allergic reactions (hypersensitivity), including a severe reaction known as anaphylaxis. Stop using DUPIXENT and tell your healthcare provider or get emergency help right away if you get any of the following symptoms: breathing problems, fever, general ill feeling, swollen lymph nodes, swelling of the face, mouth and tongue, hives, itching, fainting, dizziness, feeling lightheaded (low blood pressure), joint pain, or skin rash.
- Eye problems. Tell your healthcare provider if you have any new or worsening eye problems, including eye pain or changes in vision.
- Inflammation of your blood vessels. Rarely, this can happen in people with asthma who receive DUPIXENT. This may happen in people who also take a steroid medicine by mouth that is being stopped or the dose is being lowered. It is not known whether this is caused by DUPIXENT. Tell your healthcare provider right away if you have: rash, shortness of breath, persistent fever, chest pain, or a feeling of pins and needles or numbness of your arms or legs.

The most common side effects in patients with chronic rhinosinusitis with nasal polyposis include injection site reactions, eye and eyelid inflammation, including redness, swelling, and itching, high count of a certain white blood cell (eosinophilia), trouble sleeping (insomnia), toothache, gastritis and joint pain (arthralgia).

Tell your healthcare provider if you have any side effect that bothers you or that does not go away. These are not all the possible side effects of DUPIXENT. Call your doctor for medical advice about side effects. You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

Use DUPIXENT exactly as prescribed. Your healthcare provider will tell you how much DUPIXENT to inject and how often to inject it. DUPIXENT is an injection given under the skin (subcutaneous injection). If your healthcare provider decides that you or a caregiver can give DUPIXENT injections, you or your caregiver should receive training on the right way to prepare and inject DUPIXENT. **Do not** try to inject DUPIXENT until you have been shown the right way by your healthcare provider.

Please see accompanying Brief Summary of Important Patient Information.

Brief Summary of Important Patient Information about DUPIXENT® (dupilumab) (DU-pix'-ent)

injection, for subcutaneous use

What is DUPIXENT?

- DUPIXENT is a prescription medicine used:
 - with other medicines for the maintenance treatment of chronic rhinosinusitis with nasal polyposis (CRSwNP) in adults whose disease is not controlled.
- DUPIXENT works by blocking two proteins that contribute to a type of inflammation that plays a major role in chronic rhinosinusitis with nasal polyposis.
- It is not known if DUPIXENT is safe and effective in children with chronic rhinosinusitis with nasal polyposis under 18 years of age.

Who should not use DUPIXENT?

Do not use DUPIXENT if you are allergic to dupilumab or to any of the ingredients in DUPIXENT. See the end of this summary of information for a complete list of ingredients in DUPIXENT.

What should I tell my healthcare provider before using DUPIXENT? Before using DUPIXENT, tell your healthcare provider about all your medical conditions, including if you:

- · have eye problems.
- have a parasitic (helminth) infection
- are scheduled to receive any vaccinations. You should not receive a "live vaccine" if you are treated with DUPIXENT.
- are pregnant or plan to become pregnant. It is not known whether DUPIXENT will harm your unborn baby.

Pregnancy Registry

There is a pregnancy registry for women who take DUPIXENT during pregnancy. The purpose of this registry is to collect information about your health and your baby's health. You can talk to your healthcare provider or contact 1-877-311-8972 or go to http://mothertobaby.org/ongoing-study/dupixent/ to enroll in this registry or get more information.

 are breastfeeding or plan to breastfeed. It is not known whether DUPIXENT passes into your breast milk.

Tell your healthcare provider about all of the medicines you take including prescription and over-the-counter medicines, vitamins, and herbal supplements.

Especially tell your healthcare provider if you:

- · are taking oral, topical, or inhaled corticosteroid medicines
- · have asthma and use an asthma medicine
- · have CRSwNP, and also have asthma

Do not change or stop your corticosteroid medicine or other asthma medicine without talking to your healthcare provider. This may cause other symptoms that were controlled by the corticosteroid medicine or other asthma medicine to come back.

How should I use DUPIXENT?

- See the detailed "Instructions for Use" that comes with DUPIXENT for information on how to prepare and inject DUPIXENT and how to properly store and throw away (dispose of) used DUPIXENT prefilled syringes.
- Use DUPIXENT exactly as prescribed by your healthcare provider.
- Your healthcare provider will tell you how much DUPIXENT to inject and how often to inject it.
- DUPIXENT comes as a single-dose pre-filled syringe with needle shield or as a pre-filled pen.
- DUPIXENT is given as an injection under the skin (subcutaneous injection).
- If your healthcare provider decides that you or a caregiver can give the
 injections of DUPIXENT, you or your caregiver should receive training
 on the right way to prepare and inject DUPIXENT. Do not try to inject
 DUPIXENT until you have been shown the right way by your healthcare
 provider.
- If you miss a dose of DUPIXENT, give the injection within 7 days from the missed dose, then continue with the original schedule. If the missed dose is not given within 7 days, wait until the next scheduled dose to give your DUPIXENT injection.

How should I use DUPIXENT (continued)?

- If you inject more DUPIXENT than prescribed, call your healthcare provider right away.
- Your healthcare provider may prescribe other medicines to use with DUPIXENT. Use the other prescribed medicines exactly as your healthcare provider tells you to.

What are the possible side effects of DUPIXENT? DUPIXENT can cause serious side effects, including:

- Allergic reactions (hypersensitivity), including a severe reaction known as anaphylaxis. Stop using DUPIXENT and tell your healthcare provider or get emergency help right away if you get any of the following symptoms: breathing problems, fever, general ill feeling, swollen lymph nodes, swelling of the face, mouth and tongue, hives, itching, fainting, dizziness, feeling lightheaded (low blood pressure), joint pain, or skin rash.
- Eye problems. Tell your healthcare provider if you have any new or worsening eye problems, including eye pain or changes in vision.
- Inflammation in your blood vessels: Rarely, this can happen in people
 with asthma who receive DUPIXENT. This may happen in people who also
 take a steroid medicine by mouth that is being stopped or the dose is
 being lowered. It is not known whether this is caused by DUPIXENT. Tell
 your healthcare provider right away if you have: rash, shortness of breath,
 persistent fever, chest pain, or a feeling of pins and needles or numbness
 of your arms or legs.

The most common side effects of DUPIXENT in patients with CRSwNP include: injection site reactions, eye and eyelid inflammation, including redness, swelling, and itching, high count of a certain white blood cell (eosinophilia), trouble sleeping (insomnia), toothache, gastritis and joint pain (arthralgia). Tell your healthcare provider if you have any side effect that bothers you or that does not go away.

These are not all of the possible side effects of DUPIXENT. Call your doctor for medical advice about side effects. You may report side effects to FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

General information about the safe and effective use of DUPIXENT.

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. Do not use DUPIXENT for a condition for which it was not prescribed. Do not give DUPIXENT to other people, even if they have the same symptoms that you have. It may harm them.

This is a brief summary of the most important information about DUPIXENT for this use. If you would like more information, talk with your healthcare provider. You can ask your pharmacist or healthcare provider for more information about DUPIXENT that is written for healthcare professionals. For more information about DUPIXENT, go to www.DUPIXENT.com or call 1-844-DUPIXENT (1-844-387-4936)

What are the ingredients in DUPIXENT? Active ingredient: dupilumab

Inactive ingredients: L-arginine hydrochloride, L-histidine, polysorbate 80, sodium acetate, sucrose, and water for injection

Manufactured by: Regeneron Pharmaceuticals, Inc., Tarrytown, NY 10591 U.S. License # 1760; Marketed by sanofi-aventis U.S. LLC, (Bridgewater, NJ 08807) and Regeneron Pharmaceuticals, Inc. (Tarrytown, NY 10591) / DUPIXENT is a registered trademark of Sanofi Biotechnology / ©2020 Regeneron Pharmaceuticals, Inc. /sanofi-aventis U.S. LLC. All rights reserved. Issue Date: August 2020

ASK THE EXPERT

Five key questions about chronic sinusitis answered by an ear, nose, and throat doctor

Anna Butrymowicz, MD, otolaryngologist (ear, nose, and throat specialist) at UCSF Health in San Francisco, lays out some basic facts about chronic sinusitis.

Q. What causes chronic sinusitis?

BUTRYMOWICZ: The exact cause is unknown, but what we do know is that the sinus "microbiome," or the bacteria that live inside our sinuses, is very different in people with and without chronic sinusitis. This can happen because of previous infections, allergies, genetics, or changes due to smoking.

Q. Who is most likely to have it?

BUTRYMOWICZ: While we still have a lot to learn about sinusitis, we do know that people with allergies or asthma, those who smoke cigarettes, or those with a weakened immune system are more likely to develop it. There are also other kinds of illnesses associated with chronic sinusitis, like cystic fibrosis.

But not everyone with allergies or everyone who smokes ends up getting sinusitis. The path to developing it is complicated. Regardless, we know that quitting smoking will make you healthier, in the sinuses and beyond. Controlling your allergies will also give you a number of different health benefits.

Q What symptoms do most people have?

BUTRYMOWICZ: You may feel symptoms like mucus drainage from the front or back of your nose, a sensation that it's hard to breathe through your nose, pressure in your face, or decreased sense of smell. Some people will notice a bad smell, pain in their teeth, or a decrease in their sense of taste. If you have nasal polyps, you're more likely to notice a decrease in your sense of smell, but the symptoms may vary.

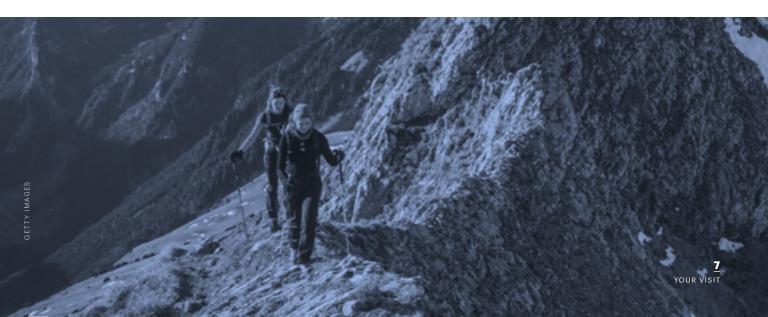
Q. How do I treat it?

BUTRYMOWICZ: Most of the time, chronic sinusitis is a lifelong condition, but we can improve and control your symptoms with ongoing medical or surgical treatment. Saltwater rinses can help wash your nasal lining and decrease swelling and are a safe and effective first step. Medications are often focused on decreasing the swelling in your nose. Steroids are strong anti-inflammatories that can be used as a spray or rinse in the

nose, or as a pill. We also sometimes use antibiotics to help decrease the bacterial load and to help decrease the swelling in the nose. If you have allergies, controlling allergies with nasal sprays, antihistamines, or even allergy shots or drops can also improve vour symptoms. If that doesn't work. surgery aimed to remove nasal polyps and open the sinuses is often successful. Newer medications have been approved for people with chronic sinusitis with nasal polyps that are antibodies against the cells that are involved in causing inflammation. These medications have been used for asthma but they're also very good at shrinking nasal polyps. These medications are most commonly used in patients whose nasal polyps have grown back after surgery.

Q. Do I need to avoid outside activities when it's cold?

BUTRYMOWICZ: There's no reason you can't enjoy the great outdoors, regardless of the season. But, if you have allergies to environmental allergens like trees or grasses, then you may notice worsening symptoms during the season those plants bloom. That is why it's important to see your otolaryngologist to make sure you're on the appropriate medication to control your symptoms, so you can enjoy hiking, picnics, and other outdoor activities.



DAILY DIARY

Keep track of your chronic sinusitis symptoms so you can give your doctor an accurate snapshot of your condition. "It's important to know what symptoms you're having, what prescription or over-the-counter medications you're taking and when, and how those medications are helping," says Tina Elkins, MD, assistant professor in the Department of Otolaryngology at UNLV School of Medicine in Las Vegas, NV. "Also, think about where you were when the symptoms started. Were you outside or inside? Was it a dusty environment? This can help us determine if you have allergies."

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
DATE							
SYMPTOMS							
MEDICATIONS TAKEN							
RESPONSE							
POSSIBLE TRIGGER(S)							

SCAN OR COPY THIS PAGE BEFORE YOU FILL IT IN TO USE FOR TWO OR THREE MONTHS



LIVING WITH CHRONIC SINUSITIS

One woman's account of coping with this lifelong condition

I've had terrible allergies since kindergarten. Everything outside does me in: trees, weeds, grass, mold, dust, you name it. I can remember riding on the lawn mower with my dad (best thing ever when you're a kid!) and later that night my nose would swell completely shut. He would massage my face trying to get my sinuses open. Since they couldn't drain, eventually they'd get infected. Then they'd swell more. It was a miserable circle I went through all the time. Finally, doctors diagnosed me with chronic sinusitis.

I did allergy shots for the first time in first grade. I'm on my fourth round now. During college and my early 20s, my infections got absolutely debilitating. I couldn't function. My sinuses would swell shut, and I'd have to go to the emergency room to be hooked up to an IV of antihistamine to get my nose to open. Even though logically you know you can breathe through your mouth, it sends you into panic mode. But the worst part is infection that you can't get rid of. Your whole body is really sick, fighting it. I'm generally sick every year from Thanksgiving to Valentine's Day dealing with recurring infection. One Christmas I couldn't fly because doctors were worried the pressure would send the infection into my brain.

The thing about sinus infections is they're an "invisible" illness. So when you feel like you don't want to get out of bed, but no one can see what's wrong with you, you can start to feel like a hypochondriac. I used to have a lot of trouble sleeping because I couldn't breathe. I was chronically exhausted. And doctors thought I had sleep apnea because my pharyngeal passages were blocked and essentially collapsing in the middle of the night. When the ear, nose, and throat specialist I've been with for 15 years, saw my X-rays for the first time, he said, "I've never seen anything like this." That was really validating!

I had my first surgery in college, and then two more in my 20s. The first was to fix a deviated septum. The second and third surgeries fixed it again, because cartilage has memory and can move back. They also searched for polyps in those surgeries. I get so sick, they always think there's got to be something up there, but there's not.

Right after surgery, you feel like you can breathe again. It's fantastic. But surgery can't fix allergies. What it does is ensure my sinuses are in the best shape possible for when they swell shut from allergies. That way when I get sick, I won't get sick for as long.

One thing I can say is that I know my body really well now. I can catch it earlier. It doesn't happen less often, I'm just better equipped at not letting it get out of hand.

JESSICA'S TIPS

For managing chronic sinusitis symptoms

Stick to treatments even when you feel well

If I miss my twice-daily prescription nose spray several days in a row, I almost always end up sick. Whatever treatment your doctor has recommended for you, do it, even if your symptoms aren't bad.

Find a doctor you trust and stay with them

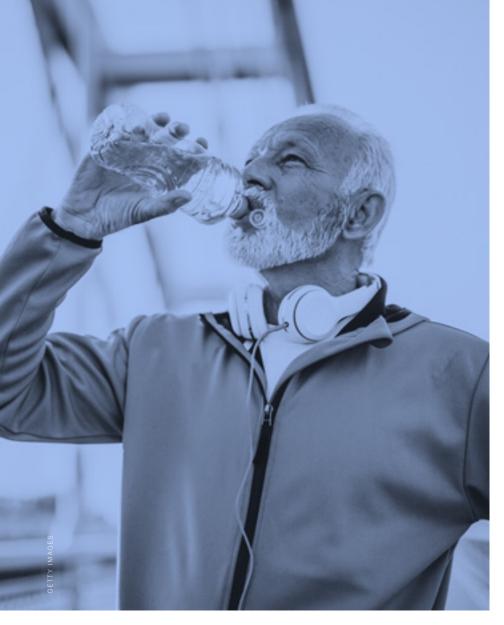
I've been seeing the same amazing ear, nose, and throat specialist for 15 years, and he knows what works for me, and trusts me when I tell him what's going on. It cuts out the treatment guessing game.

Move your body

Exercise really makes my sinuses open up and drain. If I'm mostly well but feel like I have a little bit of something coming on, movement can help.

Moisturize your sinuses

When my sinuses are really clogged, I use a sinus steam inhaler up to four times a day, which truly does help. A sinus rinse like a neti pot is another great tool if you know you've been around allergens. Don't use it if you have active infection, or it can spread it.



THINGS YOU CAN DO

Eight tips to help manage chronic sinusitis

1 Track your symptoms

The more you know, the better you can treat and prevent your chronic sinusitis. Use the diary on page 8 to write down what you're dealing with, the treatments you're taking, and how they're helping.

2 Keep your nose clean

Find an irrigation system that works for you, whether that is a nasal spray or neti pot, and wash regularly. "Irrigating the sinuses with saline frequently helps, because the nose is an air filter for your lungs, and airborne irritants can get stuck in the nose causing persistent nasal 'flares,'" says Mas Takashima, MD, ENT, chair, Department of Otolaryngology, Head and Neck Surgery, Houston Methodist.

3 Take it easy

Even if others can't see your sinus infection, your body definitely feels it. Give yourself the rest you need so your immune system can do its job well.

4 Seek out steam

Your sinuses do best when they're wet. In a dry spot? "Create moisture," says Tina Elkins, MD, assistant professor of otolaryngology at UNLV School of Medicine in Las Vegas, NV. Here's how: Lean over a bowl of hot water with a towel draped over your head and breathe in the vapor. Or hang out in a hot shower. The moist air will help your sinuses drain and relieve pain.

5 Monitor allergies

Are allergies the cause of your sinus infections? Avoid irritants whenever possible. "If you're exposed to an allergen, shower, change clothes, and use the nasal irrigation once you're away from the problem," Elkins says.

6 Follow doctor's orders

Treatments can only work if you use them. Stick to your medication schedule and dosing, even once you start feeling better. "For example, the nasal steroid sprays need to be used on a daily basis for the spray to be effective," Elkins says.

7 Hydrate

While water can't cure a sinus infection, it can help with some of your discomfort. Drinking enough water thins your mucus and makes it easier for you to blow out.

8 Don't smoke

Whether you're breathing in smoke from your own cigarette or someone else's, it's bad news for your sinuses. Cigarette smoking increases your risk of getting sinus infections and makes it harder to heal from them, too.

BY THE NUMBERS

As a rhinologist with a subspecialty in otolaryngology, 80% OF THE PATIENTS IN MY CLINIC ARE PATIENTS WITH THE COMPLAINT OF CHRONIC SINUSITIS.

MAS TAKASHIMA, MD, ENT,
CHAIR, DEPARTMENT OF OTOLARYNGOLOGY,
HEAD AND NECK SURGERY, HOUSTON METHODIST

242,000

NUMBER OF EMERGENCY ROOM VISITS

from December 2016 to December 2017 caused by chronic sinusitis.



40

10

60

TYPICAL AGE RANGE of people with a chronic sinusitis with nasal polyps diagnosis.

1% **TO**

PROPORTION OF THE U.S. POPULATION

with nasal polyps.



146 OF 1,000

People in the U.S. WITH CHRONIC SINUSITIS.



SOURCES: Medscape: "What Is the Prevalence of Chronic Sinusitis in the US?", CDC: "Chronic Sinusitis"; The Journal of Allergy and Clinical Immunology: In Practice: "Chronic Rininosinusitis with Nasal Polyps", Northwestern Medicine: "Chronic Sinusitis and Nasal Polyps: Diagnosis and Treatment".

WE'RE IN THIS TOGETHER.

You don't have to manage chronic conditions alone.

The Asthma and Allergy Foundation of America is here to help you breathe easier.

By joining our community, you can chat with other people managing chronic sinusitis, nasal polyps, asthma and allergies in a safe and encouraging environment. You can also advance research and take action to advocate for policies to support people with chronic conditions.

aafa.org/join



66 YOU'RE MORE AT RISK OF A SINUSITIS RECURRENCE IF YOU'RE NOT BEING TREATED EFFECTIVELY. In patients with chronic sinusitis, it's most important to be proactive and try to prevent flare-ups."

TINA ELKINS, MD

ASSISTANT PROFESSOR IN THE DEPARTMENT OF OTOLARYNGOLOGY AT UNLV SCHOOL OF MEDICINE IN LAS VEGAS, NV.

next steps CHECKLIST

My diagnos	is:			
My treatm ➤ LIFESTY	ent plan: LE TREATMENTS T	O TRY		
➤ MEDICA	TIONS			
DRUG				
DOSE				
WHEN TO TAKE IT				
HOW TO TAKE IT				
			·	
My next v	risit is schedule	d for:		
should co	all between vis	ts if:		