

ENT SURGICAL CONSULTANTS

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Migraines: An ENT Perspective

Migraines are a common, yet very under diagnosed clinical problem. *Classic* migraines are characterized by episodic attacks of head pain and associated symptoms such as nausea and sensitivity to light, sound or head movement. Migraines are generally thought of as subset of “headache” disorders, with classic migraines typically featuring unilateral (one-sided) headache as a dominant symptom. Through emerging evidence and evolving perspective in recent years, it has become apparent that many migraine sufferers may have little or no headache as a symptom. These “*atypical migraine*” sufferers may have primary complaints consisting of :

- Dizziness/ vertigo/ recurrent BPPV (positional vertigo)
- Ear/ head pain (often “sharp” and “stabbing”)
- “Sinus” pressure/congestion (seen in 40% of migraine sufferers)
- Fluctuating hearing loss
- Ringing in the ears (tinnitus)
- Visual alteration
- Gastrointestinal symptoms (cyclical vomiting/ abdominal migraine/ periodic diarrhea)

Prevalence

28 million Americans with “classic” migraine headaches
Females are 3 times more likely than males
Peak incidence is between 30-50 years of age
At age 35, 28% of all females have migraine headaches
It is estimated that <50% of migraine sufferers have been diagnosed/treated

Pathogenesis

Migraine is an inherited problem of ion channels in the brain. Migraine sufferers have a hard time adapting to strong stimuli such as loud noise, bright light, or excessive motion; in essence, migraine sufferers have a relatively “sensitive brain.” These stimuli can produce abnormal electrical activity in, on, or around the brain, which can then result in a migraine attack.

Migraine Triggers

A migraine trigger is any environmental, dietary, or physiologic factor that can provoke migraine activity in the brain.

Environmental triggers: -odors

-bright lights

-weather (sensitive to cold, wind, barometric changes)

Food triggers: 2 main categories

1) byproducts of food aging (e.g., fermented products such as red wine, aged cheeses, yeast in fresh bread and yogurt)

2) foods with chemicals similar to neurotransmitters (“brain messengers”) (e.g., coffee, chocolate, MSG, nitrates used as preservatives in prepackaged foods)

{FOR A COMPLETE LIST OF FOOD TRIGGERS, SEE APPENDIX 1}

Physiologic triggers: -stress (probably the most important trigger!!!!)

-fatigue/ irregular sleep patterns

-hunger

-pain (e.g., neck injury and spasm, temporomandibular joint (TMJ) pain, sinus pain)

- hormone changes (e.g., drop in estrogen before menstrual period or after menopause)
- eye strain

Treatments

1. Trigger identification and avoidance
 - Migraine diary
 - Dietary changes
 - Main triggers: Chocolate, wines, caffeine, aged cheeses, MSG, yeast, nuts
 - Stress management
 - Improved sleep habits
 - Regular exercise
 - Avoid the “Vicious cycle” (narcotics, caffeine, decongestants (e.g., pseudoephedrine), “catch-up” sleep)
2. Correct the correctable
 - Eye exam
 - Sinusitis management
 - TMJ treatment (soft diet, warm compresses, mouth guard)
3. Medications: 2 categories
 - Medications to elevate the threshold (i.e., make the brain less “sensitive”)
 - Many were originally used to treat depression, seizures, blood pressure
 - Common initial medication is Nortriptyline (main side effects: sedation (so take at bedtime), dry mouth)
 - May often take 6-8 weeks to respond
 - Medications to abort acute attacks
 - Because they can cause rebound, should not be used more than 6-8 times per month

Additional Resources

- “Heal Your Headache, the 1-2-3 Program,”* author David Bucholz, M.D.
- “Migraine,”* author Oliver Sacks, M.D.
- For more comprehensive information on this topic, Google “Migraine Delaware Biotechnology Institute,” look for “Teixedo Patient Information.”

APPENDIX 1

Seasoning	Figs	Nutrisweet	Sulfites
Aged meats	Flavored snacks	Nuts	Sweet n' Low
Anchovies	Flavorings		
Autolyzed yeast	Fresh beef liver		
Avocados		Olives	Tea
	Fresh bread	Onions	Tenderized meats
Bacon	Frozen yogurt	Oranges and juice	Textured protein
Bagels		Papayas	Tyramine
Bananas		Parmesan cheese	
Beef jerky	Garbanzo beans	Passion fruit	Ultra-pasteurized items
Blue cheese	Gelatin	Pate	
Bouillons	Fresh bread	Pea pods	Vegetable protein
Breadcrumbs	Frozen yogurt	Pepperoni	Veggie burgers
Brewers yeast		Pickled fish	
Brick cheese	Garbanzo beans	Pickles	
Brie cheese	Gelatin	Pineapples and juice	Whey protein
Broad Italian beans	Glutamic acid	Pinto beans	Wild game
Broth	Grapefruits and juice	Pizza	
Buttermilk	Gravy		Yeast
	Gruyere cheese	Pizza dough	Yeast extract
		Plant protein	Yogurt
Calcium caseinate		Processed meats	
Camembert cheese	Hams	Protein concentrates	
Canned meats	Heavy alcohol drinks	Protein fortified items	
Carrageenan	Hot dogs	Provolone	
Caviar	Hydrolyzed protein		
Champagne		Raisins	
Cheap buffets		Raspberries	
Cheddar cheese	Iced tea	Ready-to-eat meals	
Cheese spread		Red plums	
Chicken livers		Red vinegar	
Chinese food	Kombu (seaweed extract)	Red wine	
Chocolate		Restaurant food	
Clementines	Lemons and juice	Rice protein	
Coffee	Lima beans	Romano cheese	
Coffee cake	Limes and juice	Roquefort cheese	
Coffee substitutes	Lentils		
Cola	Liverwurst		
CROUTONS	Low calorie foods	Saccharin	
Cultured items	Low fat foods	Salami	
Cured meats	Lunchmeats	Salty snacks	
		Sauerkraut	
Dark alcohol drinks	Malt extract	Sausage	
Dates	Malted barley	Seasoned salt	
Decaf coffee	Maltodextrin	Smoked fish	
Decaf tea	Marinated meats	Smoked meats	
Doughnuts	Mozzarella cheese	Snow peas	
Dried fruits with sulfites	MSG	Sodium caseinate	
	Muenster cheese	Soft pretzels	
		Soups	
Enzyme modified items		Sour cream	
	Natural flavors	Soy products	
Fava beans	Navy beans	Soy protein	
Fermented items	Nitrates	Soy protein concentrate	
Fermented meats	Nitrites	Soy protein isolate	
Feta cheese	Nut butters	Soy sauce	
		Stilton cheese	