

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