

George Preti, PhD
Member, Monell Chemical Senses Center

DIAGNOSTIC PROTOCOL TMAU/PERSONAL MALODOR

Please understand that Dr. Preti runs a busy research laboratory. His work with patients is done as time permits. Dr. Preti has a Ph.D. in organic chemistry, and is not a physician or dentist.

If you wish to be seen as a patient, Dr. Preti will need a 1-2 page written history of your problem that includes the following information:

1. A complete description of your symptoms, including how long they have been present and how frequently they occur
2. Does the odor originate from a particular part of your body: upper body, head, groin, etc?
3. Does anyone else in your family have similar symptoms?
4. Do close relatives, friends or co-workers tell you when the odor is present?
5. Does the odor vary with respect to your menstrual cycle?
6. Have you seen a doctor for this problem? If so, what did s/he tell you?
7. Important: Is there someone you know and trust who can tell you when the odor is present?

You can email this Dr. Preti at bodyodorinfo@monell.org.

It also is helpful if you can request a letter from your doctor or dentist. This letter should contain a brief description of previous evaluations and treatments and of your overall health status.

When received, your letter puts you on the patient waiting list. Please be patient - most patients are seen within 6 -12 months. Patients are seen at a minimum cost (\$300.00) since there are no private or public funds to support this effort. Insurance is not accepted.

You must come to Monell on two successive days to receive a comprehensive diagnostic evaluation. In general, all patients will go through the steps outlined on the next page. Depending on the nature of your problem, your preparation and diagnostic protocol may be altered slightly. This will be determined by your symptoms and discussions with Dr. Preti.

Steps 1, 10, & 11 constitute the choline challenge test for TMAU and may be done at home if you wish to have the ingredients and instructions sent to you. You will then need to arrange to send your frozen samples to Monell packed in dry ice in an insulated container.

- continued -

PREPARATION

Overnight fast, beginning at 10pm. You may drink water up until the time you go to bed, but no food or liquids in the morning.

No deodorant, antiperspirants, cologne, cosmetics or fragranced products on the morning of your visit.

If being evaluated for body odor problem, no deodorants or antiperspirants for 3 days prior to testing.

DAY 1

1. Collect first morning voided urine (baseline for choline challenge test) and bring to Monell.
2. Arrive at Monell in fasted condition from 10 pm the night before. No cologne, cosmetics or fragrances. Complete questionnaire and interview.
3. Organoleptic* evaluation of patient's breath by 2 judges, using a scale of 1-10.
4. Analysis of mouth air by GC/FPD** for volatile sulfur compounds (VSC): H₂S, CH₃SH, (CH₃)₂S (2-3 repetitions).
5. Swab tongue for bacteria which produce VSC.
6. Determination of resting whole salivary flow rate.
7. Collect stimulated saliva (< 10 ml) for incubation/headspace analysis by GC/FPD (VSC) and GC/MS***
8. Collect underarm odors by placing 4"x4" cotton pads in patient's axillae (armpit). This occurs only if patient indicates a body odor problem - if so patient must refrain from using deodorants or antiperspirants for 3 days prior to testing.
9. Lung air collection (20 l) for analysis by GC/FPD (VSC) and GC/MS.

10. Administer 5g of oral choline in 12-16 oz of juice for TMAU choline challenge test. Over the next 24 hrs, patient must:

A) collect urine in three 8-hr aliquots.

B) collect 2 stimulated whole saliva samples (< 10 ml) in each 8-hr time frame using masticator stimulation with unflavored gumbase

11. Analyze baseline saliva by GC/FPD GC/MS and electronic nose.

12. Remove axillary pads and perform organoleptic evaluation; extract and GC/MS, if necessary

13. Collect 10-20cc of blood for DNA/genetics screen for TMAU

DAY 2

1. Patient returns to Monell with urine and saliva samples
2. Discussion of results from Day 1

Technical terminology:

*Organoleptic evaluation: sensory evaluation by noses of trained smellers

**GC/FPD= gas chromatography/flame photometric detection

***GC/MS= gas chromatography/mass spectrometry