

# **APTPG**

## **ASSOCIATION OF PROFESSIONALS TREATING PROBLEM GAMBLING**

# **THE LEARNING CENTER**

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### **TANOREXIA**

**Tanorexia is the term used to describe a condition in which a person, most notably Caucasian people, participates in excessive outdoor sun tanning or excessive use of other skin tanning methods (such as tanning beds) to achieve a darker skin complexion because they perceive themselves as unacceptably pale. The syndrome is different from tanning dependence, although both may fit into the same syndrome and can be considered a subset of tanning dependence.**

**Although the term “tanorexia” has been used by the media and several doctors to describe the syndrome, both the word and syndrome have not been widely accepted by the medical community, and is considered slang by many. The term was coined after the medical condition anorexia nervosa, a disorder characterized by low body weight and body image distortion with an obsessive fear of gaining weight. It can be likened to the common practice of adding the suffix “-aholic” (from the term alcoholic) to the end of any action or food someone enjoys extensively and often (e.g., “choc-aholic,” “work-aholic” golf-aholic,” shop-aholic,” etc.).**

**Tanning addiction isn't well-understood or well-studied. The latest figures—which date to 2005—found that approximately 30 million Americans each year use sunlamps, tanning booths and/or sunbeds to achieve an indoor tan. Most are driven by a simple desire to improve their appearance, and most will leave the salon a little browner and at a slightly higher risk for skin cancer, but otherwise unaffected.**

**An unfortunate few, however, will return over and over. Many researchers believe that compulsive tanning is driven by a need to re-experience the relaxing sensation of the chemicals that are released by the brain in response to the UV light. Researchers have also found that individuals struggling with certain mental illnesses, most notably obsessive-compulsive disorder (OCD) or body dysmorphic disorder (BDD), are more prone to developing a tanning addiction than the general population. OCD is characterized by obsessive, repetitive thoughts and behaviors, and BDD involves an extreme preoccupation with small or nonexistent flaws in one's appearance.**

### **HOW TANNING CHANGES THE BRAIN:**

**People who frequently use tanning beds experience changes in the brain activity during tanning sessions that mimic the patterns of drug addiction.**

**Scientists have suspected for some time that frequent exposure to ultraviolet radiation has the potential to become addictive, but the new research is the first to actually peer inside the brains of people as they lay in tanning beds.**

**What the researchers found was that several parts of the brain that plays a role in addiction were activated when the subjects were exposed to UV rays and what this shows is that the brain is in fact**

responding to UV light, and it responds in areas that are associated with reward. There are areas, particularly the striatum, that we see activated when someone is administered a drug or a high-value food like sugar.

In recent years, scientists also began to wonder whether deliberately ignoring the potentially lethal side effects of regular UV exposure was a sign that the motivation for frequent tanners was more than skin-deep. Could habitual tanning be an addictive behavior?

A study in 2005 did show that a large proportion of sunbathers met the psychiatric definition of a substance abuse disorder, based on their answers to a variation of a test used to help diagnose alcohol addiction.

Most people are well aware of the dangers of tanning, both from the sun and from indoor tanning sun beds, they are also ambivalent—if not torn---by society's mixed messages (a golden tan is the index of chic!). On one hand, science unequivocally has linked ultraviolet (UV) light exposure with cancer, but, on the other hand, the social pressure to conform to the tanned ideal is alive and well in the twenty-first century. The distribution of people along the axis of tanning intensity, from no tanning to extreme exposure, may resemble a Gaussian curve. On the left, some people have eliminated tanning completely from their lives; in the middle, the majority have adopted a cautious moderation approach using sunscreen and avoiding prolonged exposures; and on the right, at the other end of the spectrum, we find a small number of people who tan excessively and most likely pathologically. The risk factors, biopsychosocial-spiritual determinants, co-morbid illnesses, clinical presentation, and course of illness of this third group of people seem to resemble moderate to severe substance use disorders and other behavioral addictions such as gambling and Internet gaming.

## **CLINICAL CASE:**

**Barbara is a single 23 year old female living in New Jersey. Barbara is a hard-working, goal oriented, mature young lady. She graduated valedictorian from Bernardsville High School and now attends Columbia University. Her long term goal is to go to law school and become civil rights prosecutor. Even though she has a “work hard, play later mentality”, she does find time to party with her friends.**

**Her mother died when Barbara was 6 years old from breast cancer. She and her two older sisters were brought up by a single father and Barbara is more independent and mature than most of her friends. Her boyfriend appears to be just as driven and successful as Barbara. He is a second year medical student at New York University and wants to become an orthopedic surgeon.**

**Barbara was first exposed to sun tanning at a very young age. Her father would take Barbara and her sisters to the Jersey shore as much as possible every summer. While Barbara played in the sand, her two sisters would lie on the beach and tan and she would hear them talk about how much better they looked and felt as they got tanner. Wanting to be tan and beautiful just like her sisters, she gave up playing in the sand and began tanning right next to them.**

**When Barbara started high school, a new television show called “Jersey Shore” started up and Barbara loved watching it. The stars of the show were always praised for their tanned skin and were frequently filmed tanning on the beach or in a salon. Indoor tanning was a new trend and when one opened in her town, Barbara joined it. At first she would go tanning once in a while during the summer months but it soon became a year round activity. By the time she**

graduated from high school, Barbara was using the tanning salon 5-6 times every month, year round. The tanner she became, the more compliments she got and she loved the way her skin looked and how tanning made her feel. Tanning had such a positive effect on her life that she saw no reason to stop.

Barbara was surprised to find out when she entered college that it was more intense than she expected. Things have always come fairly easy for Barbara, but now she was having trouble meeting the demands of a college schedule. She did notice however that she always felt relaxed and stress-free after some UV rays and she began using tanning as a way to cope with stress. She bought an unlimited yearlong membership at her local tanning salon, and every morning she starts her day with a long relaxing tanning session. It was like her morning cup of coffee. She has to have it, her day simply cannot start without it. After every session, Barbara is relaxed and ready to face the world.

Nick, her boyfriend, was the first to notice something different about Barbara's tanning habits and because he is a medical student, he knows some of the dangers associated with chronic tanning. He noticed the negative effects the chronic UV rays are having on her body. Her skin has begun to have a leathery texture and is covered in fine freckles. This pretty, young 23-year-old college student suddenly looks like a middle-aged mother. Nick loves Barbara very much and knows that he has to talk to her about her tanning. He realizes that Barbara is addicted to the UV rays, but when he does bring up the subject, she fires back that addicts use drugs and that she is too smart to be an addict.

## **DISCUSSION:**

**Given the case description, which included Barbara's daily tanning throughout the year, it is likely that she has experienced tolerance to tanning and withdrawal symptoms or has tanned to avoid withdrawal symptoms. It is unknown whether she would admit to additional diagnostic criteria, but she has probably been tanning longer or more frequently than intended and spends a great deal of time in tanning related activities.. Although it was not mentioned, she may have had a persistent desire or made unsuccessful attempts to cut down or control her tanning, or she has continued tanning despite knowledge of a persistent physical or psychological problem that is likely to have been caused or exacerbated by tanning. Barbara would probably meet criteria for tanning use disorder, sometimes also referred to as tanning addiction. Barbara's condition could also classify her frequent tanning as a disorder of body image, anxiety, mood, or impulse control given the association of her frequent tanning.**

**Barbara has been influenced by the television show "Jersey Shore" and, like others in her situation, has probably been exposed to a great deal of media, marketing and misinformation portraying tanning as appealing, healthy, and safe. New York City, where Barbara attends college, also has a high density of tanning salons per square mile. As valedictorian of her high school, attendance at an Ivy League university, and planning to attend law school, Barbara faces high levels of academic and achievement oriented stress, which she admittedly addresses via daily morning tanning sessions**

**If and when Barbara admits that her tanning activity is causing her major problems and decides to seek treatment, one approach that has shown some promise in decreasing tanning and is empirically**

supported for the treatment of substance use disorders is motivational interviewing. Motivational interviewing is a person-centered method of counseling used to elicit and strengthen motivation for change. Psychopharmacology of tanning addiction is limited to the treatment of potential comorbid disorders, primarily with antidepressants. One study demonstrated that an opioid antagonist, naltrexone, reduced withdrawal symptoms in frequent indoor tanners. According to this research, it might be possible to extinguish tanning behavior if an addicted tanner were willing to take naltrexone consistently and if a patient in recovery were to relapse and engage in tanning while taking naltrexone, she or he would not experience the usual reinforcing effects of the tanning experience and therefore would become less likely to relapse into the full addiction.

### **QUESTIONS:**

1. Which one of the following characteristics has been shown to be most likely associated with frequent tanning?
  - A. Higher socioeconomic status.
  - B. Lower educational level.
  - C. Presence of younger male siblings who are averse to tanning.
  - D. Presence of older women in the family who have served as tanning role models.
  
2. "Tanorexia" is now clinically accepted to describe tanning addiction.
  - A. True
  - B. False

3. A patient with a tanning addiction says, “I work hard and deserve a good tanning session at the end of a tough day at the office”. Which one of the following responses is most consistent with the motivational interviewing approach?
- A. “No, you don’t. Tanning will kill you and you know it”.
  - B. “I’m curious about the work ethic in your family, back when you were a kid.”
  - C. “It sounds like tanning has been one way for you to reward yourself.”
  - D. “I would like you to keep a daily record of the thoughts and feelings that you have around the time you leave work.”
4. Which one of the following medications has shown some potential in the treatment of tanning addiction?
- A. Naltrexone.
  - B. Disulfiram.
  - C. Varenicline.
  - D. Nalmefene.

### **REFERENCES:**

Petros Levounis, M.D., M.A., Omar Mohmed, B.A., Carolyn J. Heckman, Ph. D., Behavioral Addictions, Tanning Addiction, pages 187-197, 2015; Anahad O’Conner, How Tanning Changes the Brain, New York Times, August 12, 2011.

If you would like the answers to the above questions, with a brief description as to why they are correct, please email me at: [algesregan@gmail.com](mailto:algesregan@gmail.com)