

FACTORS AFFECTING COLOR PERCEPTION OF A DENTIST

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The main goal of a dental restorer is to restore the function of the dentition and recreate the anatomical shape of the tooth. For many patients, the restoration of dental aesthetics is of paramount importance and the appearance of their dentition can affect their overall well-being. Giving restorations a natural appearance suitable for the patient, in which these materials are not visible, is the main goal of the restorer dentist. It is also important to have a color scheme, a sense of the shape of the tooth, which will be ideal for the patient in each individual case. Visual selection of tooth color is the most common procedure for choosing a suitable shade in dentistry. This clinical procedure requires the use of the Vita Classic (VC) color scale and is the most popular of the available color detection lines. Visual color matching is a subjective and inconsistent process with many variables associated with the doctor, such as color deficiency, experience, gender, and eye fatigue, which can affect the final appearance of the color. Awareness of the characteristics of an object does not always correspond to reality or what the retina of the eye reflects. The choice of tooth color shades depends both on the objective reflection of reality and on the subjective perception of the world, since this process involves mental activity.

To ensure the aesthetics of filling carious cavities or installing orthopedic structures, knowledge of the technology of using dental materials is not enough.

The main goal of a restorative dentist is to restore the function of the dentition and recreate the anatomical shape of the tooth. For many patients, restoring dental aesthetics is of paramount importance and the appearance of their dentition can affect their overall well-being. Giving restorations a natural appearance that is suitable for the patient, without these materials being

visible, is the main goal of the restorative dentist. It is also important to have a sense of color and a sense of tooth shape that will be ideal for the patient in each individual case.

Visual selection of tooth color is the most common procedure for choosing the appropriate shade in dentistry. This clinical procedure requires the use of the Vita Classic (VC) color guide and is the most popular color guide available. Visual color matching is a subjective and inconsistent process with many clinician-related variables, such as color deficiency, experience, gender and eye fatigue, which can affect the final appearance of the color. Awareness of the characteristics of an object does not always correspond to reality or what the retina reflects. The choice of tooth color shades depends on both the objective reflection of reality and the subjective perception of the world, since this process involves mental activity. However, the final decision on color matching remains with the patient. The overall appearance is influenced not only by color, but also by shine, texture, cultural beliefs, environmental conditions and personal tastes.

As you know, we see all colors in reflection. The human eye catches a beam that hits the retina, the signal is transmitted along a nerve to the brain, where data is processed and a person perceives a color. But in addition to color, objects differ in saturation and tone: warm or cold gamma, darker or lighter tone. There are also so-called "complementary" colors that create the overall picture. In dentistry, the concept of "complementary colors" is especially important, since when some colors are combined, the overall gamut becomes more saturated and natural, and when others are combined, it becomes unnatural and dull. At a clinical appointment, the doctor sometimes does not pay attention to factors that can distort color perception: intense light in the office, bright clothing or makeup of the patient, or simply the color of the cofferdam, which can radically change the color of the tooth being restored. Also, at the reception there is simply not enough time to balance the primary and secondary colors. A number of factors can interfere with the correct determination of tooth color, in particular: changes in color perception depending on the nature of the light source or temperature, age-related physiological changes in the visual analyzer. The perception of color is also influenced by a person's age and gender. It was revealed that doctors under 30-35 years of age determine color more accurately than their older colleagues. Also, women perceive shades much better than men.

A decrease in the activity of the eyeball, the development of age-related farsightedness and other physiological changes in the body lead to a subjective assessment of color. Thus, the dentist is exposed to a huge number of color stimuli: interior details, patients' clothing, patients' makeup. Therefore, the choice of the color of the filling material is a crucial moment of filling.

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