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Mini Review Article

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Laser and Chlorophyll in the Diagnosis and Treatment of Diseases

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The laser is a device that emits light in the form of extremely narrow wavelengths of specified wavelength. This device consists of a light collecting or activating agent that is inside the light intensifying chamber. This material strengthens the light beam produced by an external energy source (electricity or light).

Lasers are a beam of monochromatic, dyadic, divergent, parallel radiation that has revolutionized these special features in the medical sciences. Lasers are a beam of monochromatic, dyadic, divergent, and work in parallel radiation. These special features have revolutionized the medical sciences. However, we need to use laser light for proper application in treatments and diagnosis. By knowing the light properties and recognizing the light and wavelength characteristics, we can make these positive changes in different branches of medicine. Lasers may play an important role in the luminance and monochromaticity of the biology process.

Costly or Chlorophyll is a green pigment that is found in most plants, mosses and cyanobacteria. It absorbs much of the blue and red light and reflects green and yellow light from electromagnetic spectra. The green color of the plants is due to the reflection of green light from chlorophylls. The charge is to create photosynthesis in the cell that enables the plant to absorb energy from the sun. It is

a chemical that is almost in the leaves and stems of all herbs and hair. It is the substance that gives the appearance of green. The operation of photosynthesis causes plants to stay green. Plants need chlorophyll to generate glucose, the primary source of energy. The carbon dioxide in the air and water pumped by the root of the plant react to the light in the presence of chlorophyll, producing oxygen and carbohydrates.

Now we know that chlorophyll works in plants specifically to absorb light. As it absorbs red and blue light, it reflects green and yellow light. Now, if we measure the monochromatic light at different wavelengths from the prism on the green leaf and measure the intensity of photosynthesis at different wavelengths, it turns out that the effect of light blue (with wavelengths near 420 nm) and red light (with The wavelength is close to 680-670 nm) is at its maximum and the effect of the green light (with a wavelength of about 600-500 nm) is minimal. This spectrum is related to the wavelength of chlorophyll, which is the main staining of chloroplasts in plants, apparently associated with absorption properties, or in other words, the light absorption spectrum. On the other hand, the chlorophyll structure is similar to the red blood cell, and this will be a superior feature, because it is similar to the divergent lens structure.

With all these special properties of laser and chlorophyll, we can use this technique to process and diagnose diseases using molecular biological methods. We also extract chlorophyll cells from a suitable plant such as algae such as cyano bacteria and spirulina. Then we divide them into several groups in the laboratory.

The first group is exposed to red light lasers. The second group is exposed to blue light. The third group to yellow light, and the fourth group is exposed to green light. We will investigate their wavelength absorption. However, we must use the appropriate absorption of each group in diagnostic therapy.

Fields of Use in Treatment and Diagnosis

1. Wound healing
2. Photodynamic Therapy (PDT)
3. In the creation of biological and molecular bonds
4. As a stimulant in tissue for drug withdrawal
5. In the treatment of depression
6. Therapeutic and photochemical stimuli of tissue and cell
7. Use as a diagnostic agent for cancer and imaging
8. Coagulation of tissue

The use of these therapeutic and diagnostic methods requires knowledge of cellular and molecular biology, with the addition of and laser technology. Adequate knowledge of these therapeutic and diagnostic methods can be blended [1-32].

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