

CLAIMS

1. A system for performing intra-corporeal ultraviolet therapy, the system comprising:

a delivery tube, wherein the delivery tube comprises an electrical connecting means;

at least one UV light source inside the delivery tube that is configured to emit wavelengths, wherein the at least one UV light source is positioned to deliver radiation directed outwardly around the circumference of the delivery tube for a substantial length of the delivery tube; and

a power supply connected to the UV light source via the electrical connecting means inside the delivery tube.
2. The system of claim 1, wherein the delivery tube is at least partially transparent.
3. The system of claim 1, wherein the light source is a string of LEDs.
4. The system of claim 1, wherein the light source is a cold cathode tube.
5. The system of claim 1, wherein the light source is a neon filled tube.
6. The system of claim 1, wherein the delivery tube is an endoscope.
7. The system of claim 1, wherein the delivery tube is a catheter.
8. The system of claim 1, wherein the wavelengths comprise at least one of UV-A, UV-B, or any combination thereof.
9. A system for performing intra-corporeal ultraviolet therapy, the system comprising:

a delivery tube, wherein the delivery tube comprises an electrical connecting means;

a UV light source inside the delivery tube positioned to emit UV wavelengths outward from the tube and around the circumference of the tube; and

a power supply connected to the UV light source by the electrical connection means inside the delivery tube.

10. The system of claim 9, wherein the delivery tube is a catheter that comprises a lumen that is configured to pass over a guide wire.
11. A capsule for performing intra-corporeal ultraviolet therapy, the capsule comprising:
 - a battery;
 - a UV light source connected to the battery inside the capsule positioned to emit UV wavelengths outward from the capsule and in all directions outside of the capsule; and
 - a biocompatible and non-biodegradable casing covering the battery and UV light source.
12. The capsule of claim 11, wherein the UV light source is configured to radiate UV-A and UV-B radiation and filter UV-C radiation.
13. The capsule of claim 11, wherein the UV light source is at least one LED.
14. The capsule of claim 11, wherein capsule is a suppository.
15. The capsule of claim 11, wherein the casing is configured for swallowing.
16. A system for performing intra-corporeal ultraviolet therapy, the system comprising:
 - a delivery rod, wherein the delivery rod comprises a borosilicate segment and a silica segment;
 - a UV light source, wherein the UV light source is configured to emit wavelengths comprising at least one of: UV-A and UV-B; and
 - a light source attachment, wherein the light source attachment is configured to be placed between the delivery rod and the UV light source.
17. The system of claim 16, wherein the system further comprises a power source that is connected to the UV light source.
18. The system of claim 17, wherein the light source attachment comprises:

a body, wherein the body comprises a front-end aperture that is configured to connect to the light source, and a back-end aperture, wherein the back-end aperture is configured to connect to a rod; and

a fastening mechanism, wherein the fastening mechanism comprises at least one of: a screw, flat-ended stopper screw, and a nail,

wherein the fastening mechanism is configured to connect the body to the rod and stabilize position of the rod in relation to the light source.

19. The system of claim 18, wherein the light source attachment further comprises a convex lens that is configured to be placed between the front-end aperture and the back-end aperture in order to decrease light loss from the UV light source.

20. The system of claim 17, wherein the silica segment is pure silica.

21. The system of claim 17, wherein the silica segment is abraded on its surface along its length.

22. The system of claim 17, wherein the borosilicate segment is closer to the UV light source than the silica segment.

23. A method of treating a patient for an inflammatory or infectious condition inside the patient's body, the method comprising:

providing the UV treatment system of claim 1, claim 8, and claim 17;

inserting the delivery tube inside a patient cavity; and

turning on the power supply to emit an amount of UV-A and/or UV-B radiation effective for treatment of the infectious or inflammatory condition.

24. A system for performing intra-corporeal ultraviolet therapy, the system comprising:

a delivery rod comprising a UV-C filtering segment and a UV transmission segment;
and

at least one UV light source directed towards the filtering segment.

25. The system of claim 24, wherein the filtering segment comprises borosilicate.
26. The system of claim 24, wherein the delivery rod is flexible.
27. The system of claim 24, wherein the delivery rod is configured to transmit UV-A and UV-B light.