

Lasers in Eye

Surgery



Cataract surgery that once took hours can be performed in minutes without anesthetic with this solid-state laser surgery system manufactured in Canada.

One of the prices of aging is the possibility of impaired vision. While glasses may help most people, thousands of others develop the more serious problem of cataracts.

There are two types of cataract. A primary cataract is the clouding of the natural lens of the eye and the treatment is a surgical procedure to remove the natural lens and the implantation of an artificial lens. However, following this, a secondary cataract, which is a cloudy membrane that forms on the inside of the artificial lens, may develop. Cataracts generally result in drastically impaired and cloudy vision and, if left untreated, can lead to near blindness.

Until a decade or so ago, cataract-removal involved extensive eye surgery and long hospitalization owing to the need to immobilize the patient's head during recovery. Long periods of confinement to bed are not recommended, particularly for the elderly, who comprise the majority of patients with cataracts.

But new surgical techniques have been developed to remove primary cataracts through a suction technique resulting in little or no hospital stays for patients in major health care centres.

Laser technology, now being used in many areas of surgery, has found a major role in the repair of eye damage ranging from detached retina and microhemorrhages in diabetics to the removal of secondary cataracts.

A Canadian firm, Lumonics Inc., located in Kanata, near Ottawa, has developed a laser system specifically designed to correct this problem. The laser concentrates light energy into short intense bursts that produce tiny one-tenth of a millimetre cuts to