

Laser has found increasingly wider applications in the medical field, but laser is likely to cause damage to patients' skin. In this experiment, we were surprised to find that glyceryl monooleate (GMO)-based cubic liquid crystal had excellent healing effect on the skin of guinea pigs damaged by laser. Transepidermal water loss (TEWL), H.E. pathology, Masson trichrome dyeing, interleukin-6 (IL-6) levels and the percutaneous depth of fluorescein isothiocyanate (FITC) dyeing were used to evaluate the therapeutic effect of GMO-based cubic liquid crystals against laser damage of different degrees among guinea pigs. GMO-based cubic liquid crystals had an obvious effect in the treatment of slight and moderate laser damage. This finding may provide an effective medical treatment protocol for laser skin damage.