

Physical Therapy Department of Surgery

Doctoral Degree
2001

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Title	:	Helium neon versus gallium aluminum arsenide laser irradiation on burn wound healing in rats.
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Abstract	:	
<p>The aim of this work were to explore the role of laser therapy application in burn wound healing acceleration and detect the amount and frequency of laser therapy to decrease burn wound area . in this study 90 female albino rats , their mean age and weight were 6.49 +- 0.52 months and 179.96 +- 9.34 gram respectively . they were divided randomly into 3 equal groups : groups (1) (he - ne group) 30 female albino rats which are further subdivided according to energy density into 3 equal groups : group (I-A) which receive He - Ne laser at 1 J/cm² , group (I-B) which receive He - Ne laser at 2 J/cm² , and group (I-C) which receive He - Ne laser at 4 J/cm² , (2) (Ga-Al-As group) 30 female albino rats which are further subdivided according to energy density into 3 equal group : group (II-A) which receive Ga-Al-As laser at 1 J/cm² , group (II-B) ehich Ga-Al-As laser at 2 J/cm² , and group (II-C) which receive Ga-Al-Aslaser at 4 J/cm² , group (3) (control group)which doesn't receive any treatment . the result showed a significant difference between both groups and control group regarding both WSA and colony count , also the best result obtained by He-Ne at intensity of 2 J/cm² .</p>		
Key words	1.	Helium neon.
	2.	gallium aluminum arsenide
	3.	Lasers.
	4.	burn wound healing.
	5.	Rats.
	6.	physical therapy.
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