

Department of Basic Science

Doctoral Degree 2006

Author	:	Abd EI Hamid Yassin Zaalook.
Title	:	Effect of exposure to fifty hertz low intensity magnetic field on the lymphoid tissues of rats.
Dept.	:	Department of Basic Science.
Supervisors	1.	Fatma Sedeek Amin.
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Degree	:	Doctoral.
Year	:	2006.
Abstract	:	<p>This study investigated the effect of exposure to fifty HZ, 0.2 mT (2 Gauss) MF on the lymphoid tissues of Rats. For this purpose sixty adult male albino rats were divided into 3 main groups (I .II And / III) 20 animals per each groups (I) used as control group (II) continuous exposure for one month / III) intermittent exposure for 8 hours daily for one month, then all animals were subdivided into subgroups of 10 rats. These Six groups of 10 rats per each were used 5 in the present work (Groups I a and b) were used as controls. (Group II a) were continuously exposed or for one month. (group III a) were intermittently exposed 8 hours daily to Same MF, All animals of groups Ia , II a and III a were scarified immediately after exposure while those of groups I b. II b and III b were examined 30 days later after first exposure duration. All lymphoid organs (thymus, hone marrow , spleen and Lymph node) and peripheral blood (PB) were histologically examined by using light microscope. The results indicated presence many histopathological alterations, the incidence was higher in continues exposure group (II a) to MF than intermittent exposure group (III a) for the same MF . Also histopathological alterations decrease or completely disappeared in both groups II b and 111 b (the groups left 30 days away from MF exposure after first exposure (duration) in comparison to control group (I b).</p>
Key words	1.	magnetic field.
	2.	Iyrnphoid organs.
	3.	immune system.
Arabic Title Page	:	تأثير التعرض للمجال المغناطيسي منخفض الشدة، وبتردد خمسون هيرتز على الأنسجة الليمفاوية للفئران.
Library register number	:	1461-1462.

**ELECTRONIC GUIDE TO THESES APPROVED BY
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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Sahar M. Adel EI-Hakke.
Title	:	Three-dimensional lumbar motion analysis in normal and low back Is function.
Dept.	:	Department of Basic Science.
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Degree	:	Doctoral.
Year	:	2006.
Abstract	:	
<p>Background: Considering the overall expenses involved in treating low back dysfunction (LBD), the condition has broad implications. Purpose: establishing baseline of normal profile and compare with lumbar profiles in low back dysfunction during functional activity. Subjects: 100 subjects were examined (50 healthy and 50 LBD patients). Their age ranged from 30-50 years, with mean age of (39.46 ± 5.66), weight (78.78 ± 3.19), and height (163.04 ± 4.95) for normal subjects. And mean age of (39.86 ± 4.29), and weight (80.52 ± 5.26) and height (163 ± 4.28) for low back dysfunction patients. Method: Intra-rater reliability of the Qualisys motion capture device of 30 subjects was investigated. The Qualisys motion capture system was used to measure the amount of thoracic, lumbar, hip, knee angles during forward bending. Results: There is a significance difference in spinal flexibility, lumbar profiles, and hip-lumbar angle $p = 0.000$ between normal $(11.92 \pm 1.77, 45.57 \pm 3.8, 117.71 \pm 6.60)$ and LBD $(7.90 \pm 1.04, 43.27 \pm 3.34, 114.36 \pm 4.24)$. There is a high significant correlation between BMI and lumbar angle $r = 0.766$. Conclusion: Low back dysfunction patients have less mobility than normal subjects in regarding to spinal flexibility, lumbar angle, hip - lumbar angle. LBD patients showed high degree of impairment measured by the functional rating index and correlated with the duration of the impact of low back dysfunction.</p>		
Key words	1.	Normal profile.
	2.	Low back dysfunction profile.
	3.	Qualisys motion capture system.
	4.	Hamstring flexibility.
	5.	functional activity.
Arabic Title Page	:	دراسة ثلاثية الأبعاد لحركة الفقرات القطنية في الأشخاص الطبيعيين والمصابين بألم أسفل الظهر.
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