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non steroidal anti-inflammatory

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.(10)

Adol

Panadol

Acetaminophen

Aetophenum

$C_8H_9NO_2$

.(4) , - ,

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- -
()

()

(5)

Bromsulphthalein

()

Quinoneimine

glutathione

Quinoneimine

- ()
() ()
(DNA)

_____ :
/
() MMC / ,
Oral gavage

() Evan
Germinal cells
:
/ , , *
Cervical dislocation *
.%

% , Tri – Sodium Citrate
Tunica
Fly mesh



% , /
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)
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(:
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%
:
:

.() 1981 Stich

$\times (/) =$

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()

:

() Bruce Wyrobek
(/)

Epididymis

% ,





(CRD)

(Duncan 1983)

.(SAS)





:

(1)

(/)

() MMC

% ,

% ,

Structural chromosomal aberrations

Ring

Break

Numerical aberration

Chain

Perihaploid

(n = 20)

.Polyploid

(/)

()

MMC

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المعاملة Treatment	معامل الانقسام الخلوي Mitotic Index	Numerical aberrations الانحرافات العددية			Structure aberrations الانحرافات التركيبية				المعدل العام Total Average
		قريب ثنائي المجموعة Peridiploi dy	متعدد المجموعة Polyploidy	كلي Total	كسر Break	سلسلة Chain	حلقي Ring	كلي Total	
ماء مقطر سيطرة سالبة	12.2	0.04±0.27 a	0.00±0.00 a	0.04±0.27 a	±0.11 0.03	±0.00 0.00	0.00 0.00±	±0.11 0.03 a	±0.38 0.09 * _a
باراسيتمول ٥٠ ملغم /كغم	10.1	0.06±0.35 a	0.09±0.30 b	0.05±0.65 b	±0.18 0.06	±0.13 0.04	0.06±0.18	±0.49 0.07 b	0.89 0.17± b
باراسيتمول ١٠٠ ملغم /كغم	9.8	0.16±0.80 d	0.12±0.50 c	0.1±1.30 c	±0.60 0.11	±0.18 0.04	0.22 0.03±	0.2±1.00 c	2.30 0.25± c
سيطرة موجبة MMC	3.5	0.03±1.10 d	0.09±0.80 d	0.1±1.90 d	±0.93 0.03	±0.20 0.03	0.02±0.50	0.2±1.60 d	±3.50 0.20 d

.(0.01 ≥)

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(2)

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(P < 0.01)

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MMC

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MMC

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(DNA)

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المعاملة Treatme nt	الحيوية %Viabili ty	عدد الحيامن Sperm count X 100 ⁶	تشوهات الراس Head abnormality				تشوهات الذنب Tail abnormality		المعدل Abnormal sperm mean
			مطرقى Hammer	شكل الموزة Banana	بدون كلاب With out hook	اخرى Other	الملتف Coiled	المنقسم Divide d	
ماء مقطر سيطرة سالبة	±84.3 0.02a	±36.0 01.02a	0.50±3.0	±1.8 0.48	0.50±4.8	0.60.39	±0.9 0.42	±0.00 0.00	6.8 *a
باراسيتمو ل ٥٠ ملغم /كغم	±78.1 0.02ab	±32.10 1.06ab	0.48±5.2	±1.8 0.41	0.51±1.0	±1.0 0.51	±1.4 0.44	±0.00 0.00	10.4 ab
باراسيتمو ل ١٠٠ ملغم /كغم	±69.3 0.03b	±30.40 1.30b	0.51±6.2	±2.0 0.53	0.50±2.1	±2.1 0.50	±2.1 0.51	±0.38 0.8	14.5 b
MMC سيطرة موجبة	±61.80 0.02b	±24.30 1.20b	±11.0 0.43	±4.0 0.48	0.43±3.0	±3.0 0.43	±2.4 0.49	±0.90 0.9	23.5 c

.(0.01 ≥)

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Effect of paracetamol in chromosomal aberration and sperm abnormalities of germinal cells in white mice

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Abstract

Paracetamol is a widely used as analgesic and antipyretic. It is a viable at all pharmacies and you can get it without special medical prescript over dosage of paracetamol can cause a serious damages like liver necrosis or muscle atrophy on acute condition it also cause damages for kidneys and pancreases functions.

The aim of study to detect the cytogenetic effects of paracetamol drug through using cytogenetic analysis on the germ cells and sperms abnormalities in white mice.

The result showed that two concentration of paracetamol (50 and 100) mg/kg caused a reduction in the mitotic index, increasing in the chromosomal aberrations, abnormalities in the sperms shape, reduction in the percent of the viable normal sperm and reduction sperm motility.

* Part of M. Sc. Thesis for the second author
