RESULTS

The sex chromatin in fibroblast nuclei examined in mesentric spreads appeared deep violet in colour compared to the pale neighbouring chromatin network . It had a well defined plano - convex shape and was adjacent to the nuclear membrane (Fig. 1)

Group I (Experimental) :

The differential percentage of sex chromatin positive nuclei of each sample in both subgroups of experimental animals after different periods of hydrocortisone injection and their population variance (σ^2) were collectively presented in table (1)

Fig. 1 : - Showing the sex chromatin in a fibroblast nucleus (arrow) (Cresyl violet stain , X 1000)

	Sample	Total cell count	% Sex chromatin positive nuclei $\bar{X}$	σ^2
subgroup (1)	A	2520	15.35 %	2.54
	B	2580	7.16 %	1.66
	C	2535	2.95 %	1.47
	D	2555	2.52 %	0.27
Subgroup (2)	E	2580	14.51 %	0.25
	F	2565	16.95 %	3.42
	G	2580	23.43 %	1.79

Table (1) : Showing the total number of examined nuclei , the mean value of the percentage of sex chromatin positive nuclei , and the population variance (σ^2) of the different samples of experimental group (group I) .

Subgroup (2) :

Sample E : -

the percentage of sex chromatin - positive nuclei ranged from 10.7 % to 16.9 % with a mean value ($\bar{X}$) of 14.5 and a population variance (σ^2)of 0.25

Sample F : -

the **percentage** of sex chromatin - positive nuclei ranged from 15.4 % to 19.2 % with a mean value ($\bar{X}$) of 16.95 and a population variance (σ^2) of 3.42 .

Sample G : -

the percentage of sex chromatin - positive nuclei ranged from 21.8 % to 21.6 % with a mean value ($\bar{X}$) of 23.43 and a population variance (σ^2) of 1.79 .

Obviously , the score of sex chromatin - positive nuclei decreased with every extrainjection of hydrocortisone ; reaching a minimal count after

the 14 th injection . However , a rebound phenomenon was observed following the stoppage of injection . (Fig. 2)

Group II (Control) : -

The differential percentage of sex chromatin positive nuclei of each sample in both subgroups of control animals after different periods of saline injection and their population variance (σ^2) were collectively presented in table II .

Table (2) shows that :

Subgroup (1) :

Sample A : -

the percentage of sex chromatin - positive nuclei ranged from 20.7 % to 28 % with a mean value ($\bar{X}$) of 24.82 and a population variance (σ^2) of 2.94 .

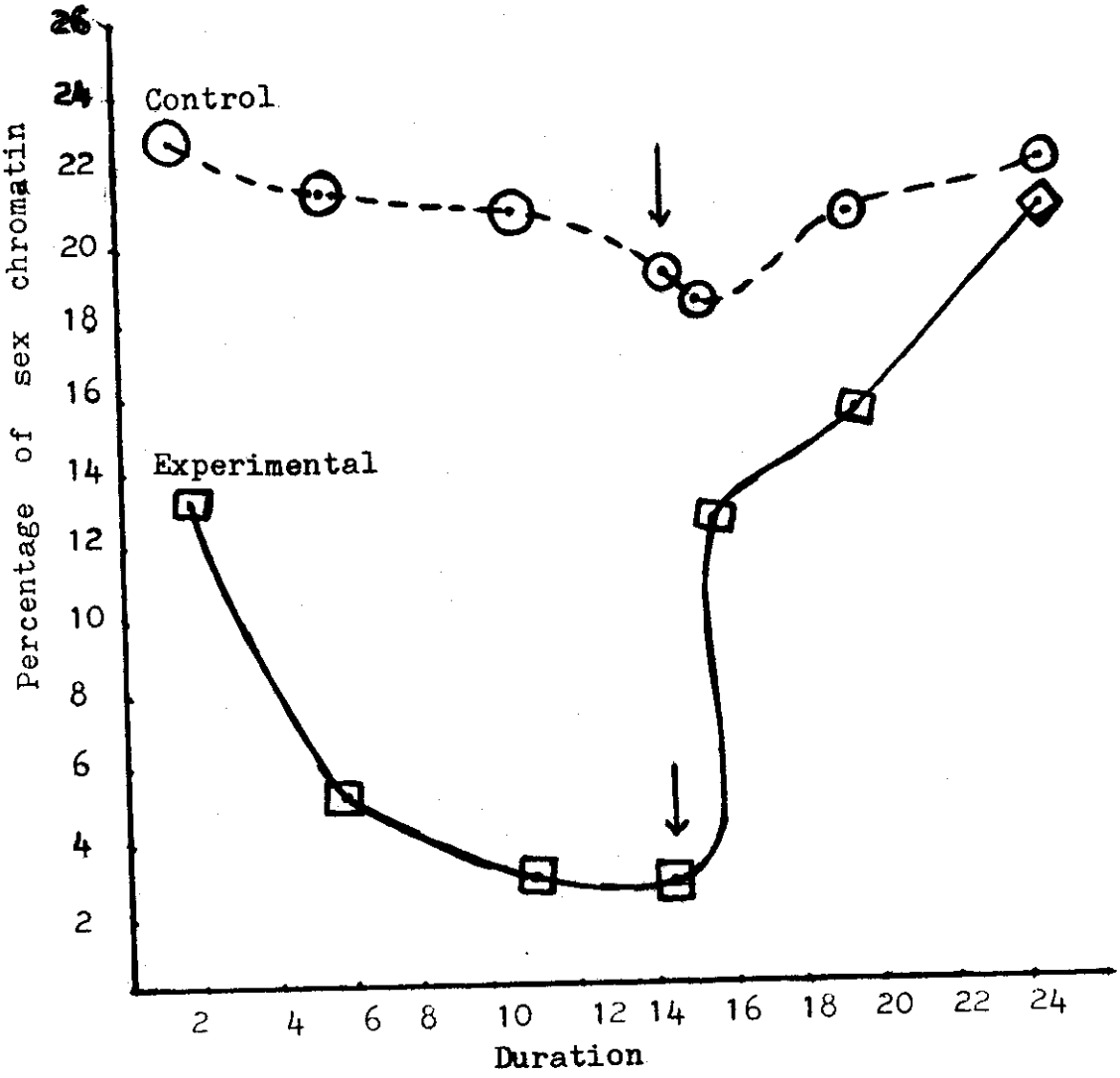

Fig 2 : A graph showing the alternations of the sex chromatin percentages in the control (---) and the experimental (—) groups along the period of experimentation .

The arrow indicates the time of stopping injections .

	Sample	Total cell count	% Sex chromatin positive nuclei $\bar{X}$	σ^2
Subgroup (1)	A	2567	24.82 %	2.94
	B	2530	23.5 %	14.9
	C	2500	22.9 %	5.7
	D	2500	21.6 %	5.3
Subgroup(2)	E	2500	20 %	10 .0
	F	2500	22.6 %	11.57
	G	2500	23.8 %	6.47

Table (2) : Showing the total number of examined nuclei , the mean value of the percentage of sex chromatin positive nuclei , and the population variance (σ^2) of the different samples of the control group (group II)

Sample B : -

the percentage of sex chromatin - positive nuclei ranged from 16.6 % to 28.3 % with a mean value of 23.5 and a population variance (σ^2) of 14.9

Sample C : -

the percentage of sex chromatin - positive nuclei ranged from 20 % to 25.8 % with a mean value ($\bar{X}$) of 22.9 and a population variance (σ^2) of 5.7 .

Sample D : -

the percentage of sex chromatin - positive nuclei ranged from 18.5 % to 24 % with a mean value ($\bar{X}$) of 21.6 and a population variance (σ^2) of 5.3 .

Subgroup (2) : -

Sample E :-

the percentage of sex chromatin - positive nuclei ranged from 15 % to 24 % with a mean value ($\bar{X}$) of 20 and a population variance (σ^2) of 10 .

Sample F : -

the percentage of sex chromatin - positive nuclei ranged from 16 % to 24 % with a mean value ($\bar{X}$) of 22.6 and a population variance of 11.57 .

Sample G : -

the percentage of sex chromatin - positive nuclei ranged from 19.4 % to 24.5 % with a mean value ($\bar{X}$) of 23.8 and a population variance (σ^2) of 6.47

In analogy to the experimental group , the scores of sex chromatin - positive nuclei decreased with saline injections and recovered after stoppage of injection but to a still lower value than the original (FIg .2)