RNA-MATRIX OF TRANSCRIPTION AND TRANSLATION AMPLIPHICATED SPEARS OF POST-RNA TRANSCRIPTS AT HIGHER ANIMALS

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For the first time we experimentally prove the concept, that RNA-matrix of transcription and translation with prokaryote and higher eukaryote in transfer and correction of genetic stream information from one generation of posterities of animals to another.

Introduction

In 2005 Lolle S.J. with coop. [1] published proofs in favour of priority of RNA in epigenetic inheritance of an attribute in higher plants. A year later Minoo Rassoulzadegan with coop. [2] established that inheritance of mutant gene Kit in posterity of mice is defined not by molecules of DNA - conventional carriers of the hereditary information, and first of all RNA.

However in 1997 we registered the patent of Russian Federation [3] where the experimental proofs confirming for the first time was presented that carry of stream of the genetic information in higher animals reached on the RNA-matrix in a direction:

$$RNA \xrightarrow{\text{Transcription}} DNA \longrightarrow \text{Synthesis of fiber}$$

In the subsequent works from 1993 to 2003 we [3-7] provided the additional experimental results, calling in question the central dogma of molecular genetics:

$$DNA \longrightarrow RNA \longrightarrow \text{Synthesis of fiber}$$

The presented proofs in favour of model, that synthesis of fiber took place in RNA-matrix. It was based on more successful in our opinion test than in French researchers [2]. We revealed new generation of physiologically active substances (FAS) - salts N-replaced 3-oxipirid [3] which had double effect on malignant cells: practically completely oppress synthesis of DNA and simultaneously stimulate synthesis of RNA up to 214 % relatively to the control. In experiment the phenomenon close to ideology Berjamin Levin [8] was revealed, dreaming in the well-known book «Cell» (1983) to be able in vivo to provide correction and to strengthen useful attributes on the vitally-important sites genome of animals and a man.

Results and Methods

Below we show the results of examples of action of salts N-aril-3-oxipiridines for speed of introducing [3H]-timidin and [^{3}H]-urudin in the cells of line of carcinomes of human ovary on puphization of polithen chromosomes of drosophilae of low mutant line D-32, growth and duplication of barmy cells C. Tropicalis stamm CK-4, ontogenesis of drosophila, rats, mice and other results.

Example 1. We studied action of perhlorates N-phenyl, N-oxiphenyl and N-tolil 3-oxipiridinies on tumoral cells of line of carcinoma ovary of human CaO_{γ}. Speed of synthesis of DNA and RNA were estimated on inclusion of [^{3}H]-timidin and [^{3}H]-uridin in the specified cells. The estimate of citostatic actions of preparation were conducted with the radiometric way *[9]*.

The results shown in fig.1 testify the dependence of synthesis of DNA and RNA (inclusions of [^{3}H]-timidin and [^{3}H]-uridin) from structure of investigated connections.

For example, under influence of N-tolil-3-oxipiridine synthesis of DNA twice increases at a doze of a preparation of 100 mkg/ml (fig.1). This effect of action of a preparation on synthesis of DNA is kept and at lower concentration. Preparation N-tolil 3- oxipiridin at a doze of 100 mkg/ml renders partial inhibitive influence on speed of inclusion of [^{3}H]- timidin. Synthesis of DNA increases at dozes of the specified preparation of 10,0 and 1,0 mkg/ml. Connection possesses high citotoxic activity in studied dozes.

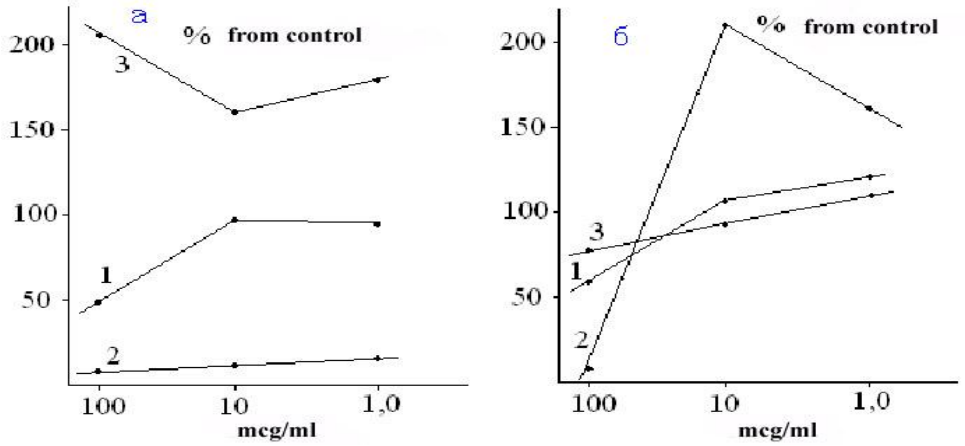


Fig 1. Dependence of inclusion of [^{3}H]-timidin and [^{3}H]-uridin in cells of lines of ovary carcinoma of a man from concentration of N-phenyl-3-oxipiridin (1), N-oxiphenyl-3-oxipiridin (2), N-tholil-3-oxipiridin (3).

Results of dependence of inclusion of [^{3}H]-uridin in cells of line carcinom of ovary of human from concentration and structures of investigated connections allows to allocate N-oxiphenil-3-oxipiridine. This preparation practically completely oppresses synthesis of DNA and simultaneously stimulates synthesis RNA considerably: inclusion of [^{3}H]-uridin increases at a doze of 10 mkg/ml on 214 % concerning a control parameter. As boundary criterion of activity 50 %-s' inhibition of inclusion of [^{3}H]-timidin and [^{3}H]-uridin at this concentration of timidin and uridin 0,5 10-3 M were used [9].

Example 2. Preparations of politen chromosomes (PC) from salivary glands of Drosophila Melanogaster was prepared with known technique [10]. The analysis of functional activity politen chromosomes was conducted with physiological card.

In allocated last the third larval age skilled drosophila F_1-and F_5 - generations of low mutant lines D-32 reared on N-phenyl-3-oxipiridin, in the fourth chromosome intensively functioning sites in the third area of Balbiani rings (BR_1) and to a lesser degree in fourth area (BR_2) within the limits of disks 4-3A_{1-6} and 4-4A_{4-6} are found out. Other three long chromosomes contain a little huge puphs with functioning up to 35 disks and more, actually passing in nucleoluse. It is possible to judge a degree of expressiveness of attributes and to following attributes: average diameter of polithen chromosomes skilled drosophila in 2 times more then control.

ПХ control animals though contain the big number of cross-section disks and the sites reminding puphs are genetically poorly active because of rather greater heterochromatic sites.

It is known [10], that intensively functioning sites in third and fourth areas BR_1 and BR_2 IV chromosomes testify to activity of formation RNA. In turn, results of research of other given I-III chromosomes containing complex puphs with functioning of 20-35 disks, actually representing nucleoluse, testify to intensive synthesis ribosome RNA on DNA nucleolus organizer [11].

Formation of a superfluous pool of pRNA (matrix, ribosome, transport and of some others) in the cell found directed mutation and steady fastening of a new useful mutation in generation

can serve as acknowledgement of an opportunity of occurrence in genome to the greater semantic information in molecules RNA than it is coded in an initial circuit of DNA. Activation under influence of investigated connections of RNA-dependent DNA-polymerase providing the return order of transfer of the genetic information means: synthesis of a circuit of DNA, on a newly synthesized RNA matrix.

Example 3. Researches of influence of N-phenyl-3-oxipiridine on growth of Candida tropicalis (16 populations) were conducted by following technique: various dozes of a preparation brought in nutrient mediums (a malt mash or the environment of Aloes) on the average in 100 repeating experiences (0,13333; 0,10; 0,0666; 0,03333 and 0,01333 mg/l). In 15 hours of incubation at 35 ^{0}C in aerobic conditions of the maintenance number of barmy cells F_1-generation in control and skilled groups counted up in chamber Gorjaeva. With the purpose of revealing of useful mutation and possible fastening in generation of an attribute in new nutrient mediums in the same sequence, as above, transferred such minimum quantity of barmy cells that it corresponded to 3-4 cells/ml. Further after incubation of cells again they were transferred on new nutrient mediums, etc., repeating this procedure with number of repeating experiences up to 10 generations (F_{10}).

In other experience to 0,5 % solution of starch and 2 ml solution of baking yeast brought of 1 % 10^{-8} mole preparation of N-phenyl -or N-ox phenyl -3-oxipiridine. The control variant differed from skilled by absence of investigated preparations in it. In 24 hours of incubation at 20-25 ^{0}C in aerobic conditions of the maintenance counted up number of barmy cells. For revealing possible fastening mutation in generation from skilled and control variants transferred on new starch solutions such quantity of cells to be corresponded in experience of 53/ml and in the control of 67/ml.

Calculation of barmy cells was conducted Gorjaeva chamber daily. Morphology of cells was investigated under usual biological microscope.

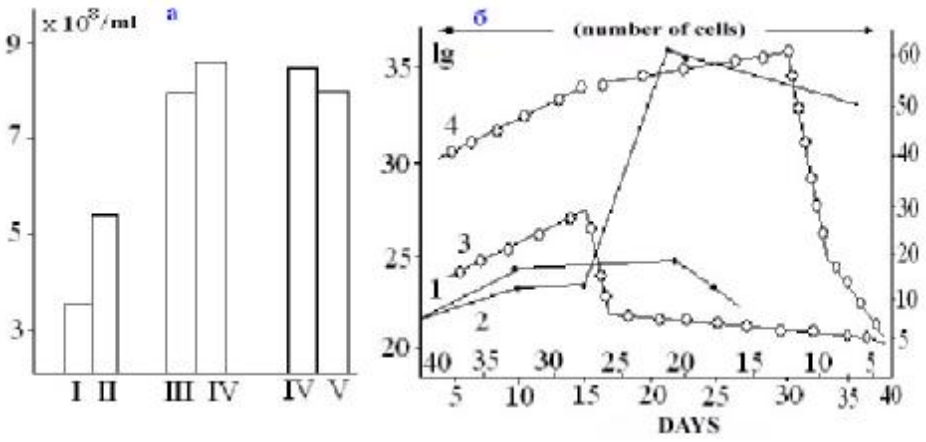


Fig. 2. Influence of various dozes of N-aril-3-oxipiridin salts on growth and duplication of barmy cultures C.tropicalis stamm CK-4. Designations: 2a-I the control, II-IV - skilled parameters of influence of dozes of N-phenyl-3-oxipiridin - 0,01333; 0,03333; 0,06666; 0,10000; 0,1333 mg/ml accordingly. 2в-1 and 2 control, 3-4 - influence 10^{-8} mole preparation N-phenyl-and N-oxiphenyl-3-oxipiridin salts on growth of population in 1 % solution of starch.

Fig. 2 presents the results of studying of influence of perchlorate N-phenyl-3-oxipiridine on growth of barmy cells C. tropicflis stamm CK-4. The action of this connection was experimented on 16 populations of cells and it was established that averagely on 100 researches of introduction N-phenyl-3-oxipiridine in a nutrient medium at optimum concentration of 0,1333 mg/l the number of barmy cells in 15 hours of incubation averagely made 834 million/ml and surpassed control populations, also incubated in a beer mash without addition of a preparation, in 2,49 times ($p < 0,001$). At the subsequent cultivation of new generations from skilled barmy cultures during 10 generations (term of supervision) in the nutrient

medium specified above without entering preparation of prolipheration of barmy cultures is kept on the average up to 1,5 times for the period of F_1 - F_{10} generations. Any changes of morphology of cells are not revealed. Synthesis of fiber for period of F_1-F_{10} of generations corresponds to speed of prolipheration.

The results of influence of salts N-phenyl-or N-oxiphenyl -3-oxipiridine on growth of colony of baking yeast on starch are presented to a nutrient medium on fig. 2b. The small number of baking yeast was inoculated in the certain volumes of starch environments. On the diagram logarithms of growth and cell fission with constant speed exponential phases are found out. Yet the exponential growth phase of baking yeast under influence of N-oxiphenile-3-oxipiridine within 30 days considerably higher to similar growth phases for control groups.

The inoculation of a small number of skilled and control eukaryote on new starch environments showed higher (on two and more orders) speed of cell fission in experience.

At entering N-phenyl-3-oxipiridine environment containing baking yeast on starch diet, the certain period a log-phase is found out (time of cells fission) with the subsequent explosive growth of colony of cells (figs. 2d: 3-control, 4-experience). It is important to note, that under influence of investigated connections the speed of division of skilled eukaryote after a log-phase explosively increases, surpassing a control parameter in tens, hundreds and thousand times, and this high speed of prolipheration was fixed during the long period of time (60 days - term of supervision).

In usual conditions barmy cells do not utilize starch. The significant explosive growth of colonies of baking yeast only on starch environment testifies to the directed mutation of genome cells aside to metabolism of starch.

Example 4. In research not pathogenic culture of intestinal bacilli E. coli and its three pathogenic stereotype - 026, 0119 and 0144 were used. They were allocated from clinical material of North-Osetiya republican children's hospital. All used bacteria concerned to stable recombinate R.

Influence of investigated connection on overcoming resistance of infectious stable recombinate microorganisms E. Coli defined in relation to following antibiotics: neomycin, monomicin, penicillin, chlortetracycline, erythromycin, oxithetraciclin, streptomycin, tetracycline, levomicin.

Definition of sensitivity to antibiotics was conducted by the standard techniques: diffusion in agar and serial cultivations in broth. The material in regular intervals distributed on a surface of environment. Cups dried 30-40 minutes at a room temperature, then on a surface environments imposed disks on uniform distance from each other and on distance of 2 cm. from edge of cups. Cups with disks maintained 30-40 minutes at a room temperature and further 16-18 hours at 36-38^{0}C.

The estimation of influence of perchlorates N-phenyl-, N-oxiphenyl-and N-tholil-3-oxipiridine was conducted on diameter of growth inhibition of colonies around disk, including diameter and the disk itself. The more the zone of a growth inhibition of experimented cultures, the higher its sensitivity to the given concentration of antibiotic: up to 10 mm sensitivity accepted for insensitive. While testing the preparations 24-hour broth culture was used. For its cultivation nutrient medium was used with following dozes of antibiotics, mg/ml: 200,0; 20,0; 2,0; 0,2; 0,02; 0,002; .0,0002; 0,00002; 0,000002; 0,0000002.

Table 1 shows the results determining the sensitivity of not pathogenic (I) and pathogenic stereotypes E. Coli 0119977 (II), 0144886 (III) and 026028 (IV) to antibiotics. From the resulted results it is visible that E. Coli is resistant to influence of all nine investigated antibiotics.

Table 1. Sensitivity of not pathogenic and pathogenic stamms E.Coli to antibiotics under influence of salts N-phenyl-, N-(n-oxiphenyl) - and N-tholil-3-oxipiridin.

Culture of a bacterium	Antibiotics								
	Neomycin	Monomicine	Penicillin	Chlorine-tetracycline	Oxitetracicline	Streptomycin	Tetracycline	Erythromycin	Levomicine
Zone of sensitivity, mm									
The control	n/h	n/h	n/h	n/h	n/h	n/h	n/h	n/h	n/h
Not pathogenic E.Coli	30 24 23	23 20 23	19	20 14 28	20	22 24 21	26 25 20	30 25 31	24 25 24
Pathogenic stereotype 0119977	27 24 35	25 23 30	30	23	30 25 40	28 23 40	30 22 30	18 30 30	20
Pathogenic stereotype 0144886	24 17 40	30 20 40	30 40	40	22	25	26 22	37	19
Pathogenic stereotype 026028	13 30 18	18 14 15	14			20	18 14	20	20 15

If to consider the diameter of zones of growth inhibition of culture, as the test for biological activity under influence of investigated connections not only stability is overcome, but also sensitivity of pathogenic and not pathogenic cultures antibiotics at 20-40 time that associates with blocking activity of amplificated gene and, hence, coding of glycoprotein increases.

Practical value of received data has been confirmed in experiment on monkeys macaques-rhesus factors Macaque mulatta suffering from recurrencing dysenteric colitis. N-phenyl-3-oxipiridine (the Report of Institute of an experimental pathology and therapy of Health Academy of USSR, 1981) is proved as a high adaptogene and therapeutic effect.

Example 5. More than 10000 individuals of low mutant lines D. melanogaster D-32 and fruit drosophilae of wild line (Berlin wild) were used in work. Virgile D. melanogaster lines D-32 for crossing in pairs 3♀ x 3♂ were placed in separate test tubes in diameter of 18 mm during 48 hours. Parental pair (PP) was deleted and their posterity passed its development from an egg up to imago on a forage from agar, raisin and semolina with various dozes of perchlorate N-phenyl-3-oxipiridine. Control group was fed with a forage without preparation. From one-age flies F_1 were made by new families. One part of PP_1 was fed with a forage with various dozes of perchlorate (group I - 0,05 г; group II - 0,10 г; group III - 0,15 г and group IV - on 0,20 г in 100г forages). Other part of PP_1 has been transferred to a forage without preparation (N). The flies received from last PP_1 were designated as F_2. Under the similar scheme we received F_3 and F_4 generation. Flies contained in thermostat at 25 ^{0}C and each 10 days replaced to a fresh forage. Daily we spent fixing duration of development of stages: time of occurrence of maggots (M), chrysalises (C), imago (I) and quantity of hatched flies. Results are given in tab. 2.

The research of the picture of puphing (table.2) was conducted in F_1 and F_5 generations of larvae of the third last age crept out of the forage and slightly dried. Influence of conditions of environment, the age factor and other parameters have been shown, whenever possible, to a minimum.

In other experience, selected in the casual order virgin flies for their third day of imaginal lives were placed in pairs 3♀ x 3♂ in separate test tubes for crossing during 48 hours then the parental pair PP was deleted. The new generation of flies passed all cycle of development on the environment with various dozes of N-phenyl-3-oxipiridin. The received flies were marked as F_1. By a casual choice the

new parental pairs were selected from virgin flies of the first F1 generations. One part of PP_1 was transferred on normal (without preparation) forage and another was placed on a forage with the same dozes of preparation as above,. From F_1 in the same way depending on the maintenance on a normal forage (N) or on a forage with a preparation (A) we received F_2 – imago generations, and further from F_2 F_3 - F_5- generations. Every 7-8 days flies were replaced to a fresh forage. Virgin one-day flies were used in all variants of experience contained in thermostat at temperature 20 ± $0,1^0$ and 25 ± $0,1^0$ and 30 ± $0,1^0$C. The account of the lost flies conducted daily.

The minimal and maximal life expectancy of control F^1 generations at 25 ^{0}C made for females 34 - 50 and males 37 - 49 days, and at 20^0 and 30^0 - 22 ± 1,0 and 10 ± 1,5 days accordingly (P< 0,001). In work the results were used in which basic concurrence of several repeated experiences were observed.

In table. 2 the results of cultivation of parental pairs D. melanogaster a wild population on N-phenyl-3-oxipiridin forage are given. From the presented data follows, that in experimental conditions of their maintenance (20^0C or 30^0C), i.e. in conditions when synthesis except for fiber of a thermal shock in the organism of drosophilae completely stops, the powerful F_1 generations of flies on the whole complex of attributes (P< 0,001) is observed: reduction of development of a cycle from an egg up to imago on 30 - 35 %; increase in length of a body at 10 %; the density of population increases in 2-4 times; average and maximal life expectancy has grown on 110-160 % concerning the control parameters fixed in F_1 - F_5 generations (term of supervision). The lead experiment is explainable from the point of view of influence of investigated connections on alarm sites of genes of drosophila ontogenesis.

Table 2. Influence of N-phenyl-3-oxipiridin on ontogenesis of D.melanogaster of wild population for the period of five generations (F1-F5) in extreme conditions.

Temperature, ^{0}C		On a forage	Difference concerning the control, %			
			Reduction of a cycle from an egg up to imago	Density of population	Average life expectancy	The maximal life expectancy
20	F_1	A	30 – 35	116	114	140
30		A	30 - 35	224	110	163
20	F_2	A	12	23	0	14
		N	27	47	8	12
30		A	24	19	50	22
		N	30	50	18	10
20	F_3	A	0	40	22	22
		N	17	50	10	27
30		A	10	36	22	11
		N	30	67	10	9
20	F_4	A	12	28	30	13
		N	19	43	20	16
30		A	25	14	60	11
		N	36	47	30	0
20	F_5	A	27	50	62	21
		N	30	31	71	52
30		A	10	30	23	11
		N	17	101	31	52

Example 6. The nonlinear rats, rats of line and mice were used in work. For research of influence of salts N-phenyl-and N-oxophenil-3 oxipiridin on generative activity and an opportunity of artificial regulation of a parity of floors of animals selected by a principle of pairs-analogues in view of age and alive weight. 70 rats of both sex used in experience. All

animals were divided into three groups in pairs (male-males). The parental pairs were placed in separate cells where they were during all experiment (before reception from these pairs five generations of posterities) in identical conditions of usual feeding, water mode and the maintenance in vivarium. The animals of control group (1) in quantity of ten pairs "families", coupled with males and females of six month age in weight 180-220 g. The animals of the second group consisting of 10 pairs of "families", males and females of six month age in weight 180-220 g. for 38 - 40 days before pairing were fed by N-phenil-3 oxipiridin by peroral introductions through the probe in the form of spirit solution in dozes of 10 mg daily, 1 time per day within 15 days. In the third group of 8 parental pairs similar age and weight, as in groups I and II. The male was fed with investigated preparation in the same dozes before 38-40 of pairing. The experiences were conducted for control and skilled groups of animals in April - May - September when the parity of sex on literary data [12] makes male-female, %: 50/50; 42,2/57,0; 45,0/55,0 accordingly.

From results of research of influence of N-phenil-3 oxipiridin on puberty, the occurrence of offspring, the weight of testicles and appendages of rats, and also the parity of weight of organs to weight of a body and mixture of parity of sex can be concluded that the rats born from parents fed by preparation, both in group II and in group III acceleration of true puberty on 38 - 26 days is revealed, terms of occurrence of the first testicles are reduced from 116-118 days in the control over 80-89 days in skilled groups, i.e. to 27-26 days.

The account of testicle in "families" were conducted within 92 days from the moment of the first testicles as this term makes average time of an interval between testicles at control rats.

For the specified period in ten control "families" (group I) the offspring made 119 rats, whereas in ten skilled "families" (group II) - 239 rats, and in eight "families" of group III - 203 rats, in five "families" of group IV – 56rats. The recalculation of one pair the quantity of rats is made by group I - 12; group II - 24; group III - 25; group IV - 11 rats. Thus the population growth goes not due to increase in individuals in offspring, but due to reduction of intervals between offspring and increases in quantity of offsprings: in group I (control) average time of intervals between offspring makes 92 days (disorder of 90-96 days), group II - 36 days (disorder 27-45), in group III - 36 days (disorder of 28-49 days) and in group IV - 94 days (disorder of 90-99 days).

The increase of fruitfulness in twice and more of nonlinear rats due to reduction of intervals between offsprings, and also occurrences of early puberty under influence of N-phenyl -3 oxipiridin was observed during five generations.

For the period of supervision we did not note appreciable ageing of reproductive function of rats. Physical development rats born in skilled families, within the first month postnatal lives did not differ from control: after 24 hours of birth the weight of rats in control families made 6-8 g.; in families of group II - 6-7 g.; groups III-7-9 g.; groups IV – 7-9 g.

The increase of weight, disclosing of eyes, cover of fur at rats in skilled families goes according to physiological specifications.

The analysis of metaphase of plates of bone brain of rats has shown, that chromosomal aberrations are absent, all chromosomes are achrocentric, normal, spiralization is not broken.

The experiment proved the presence of linear dependence between influence of N-phenil-3 oxipiridin on activation of testicles and their appendages that is shown in fast and intensive growth of their weight exceeding weight of testicles and appendages at control rats of the same age and weight (table .3) is proved.

Table 3. Influence of N-phenyl-3-oxipiridin on weight of ovary glands and appendages of rats of various age and on a parity of weight of bodies and weights of a body (10 units in group).

№	Structure of groups	Weight of testicles and appendages of rats of different age, mg					
		47-51 days			4-6 months		
		Testicles	Append-ages	Parity of weight of glands to the weight of bodies	Testicles	Appendages	Parity of weight of glands to the weight of bodies
I	The control (intact)	560,0±63,2	67,0±4,4	4,8±0,4	1200,0±93,1	110,0±10,5	6,5±0,5
II	The control (physiological)	555,0±38,5	48,0±2,5	5,0±0,5	1200,0±44,5	92,0±9,6	6,6±0,4
III	Experience	700,0±18,3	21,0±6,2	7,8±0,8	2077,0±64,7	183,5±6,3	8,3±0,4

The histological research of testicles of rats painted on Felgen and Brache has shown substantial growth of thickness of testicles up to 250-320 microns (in the control 150-200 microns), increase in all layers sperm tissue and also quantities actively mobile of spermatozoa (tab. 4).

Table 4. Parameters of function of testicles of matured rats.

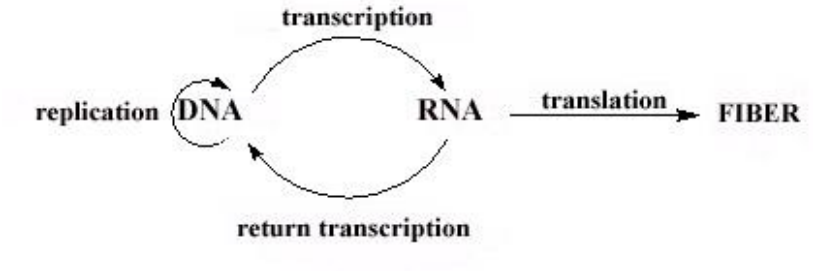
Parameters	Groups	
	Skilled	Control
Quantity of layers of spermatogenesis epitel		
1. spermatogone	1	1
2. spermatozoa - I-II orders	4-5	2-3
3. spermatid	6-7	3-4
Quantity of forming spermatids on 1 cell		
1. Sertoli	40-60	15-20
2. In % to the control	267-300,0	100,0
Mobility of spermatozoa in % 1.		
1. In four hours	60,0	45,5
2. In twelve hours	33,3	28,0
Quantity of motionless forms of spermatozoa in %	21,0	25,0
Quantity degenerative changed spermatozoa, in %	7,2	8,0

Leidig cells producing man's sexual hormones and supporting spermgenesis are functionally active, it is expressed in increase in volumes of kernels, their general sizes in comparison with the control. Nuclear-citoplazmatic parities are within the limits revealed in control rats.

Conclusion

The model of a double spiral of DNA and realization of the genetic information incorporated in it through a transcription and translation is considered a universal code for all alive organisms [8]. Detection in 1970 G.Temin and D.Baltimor [8, 11] in virions of swelling

RNA viruses containing enzyme - return transcripnaze capable to synthesize RNA allowed to formulate finally the central dogma of molecular genetics under the following scheme:



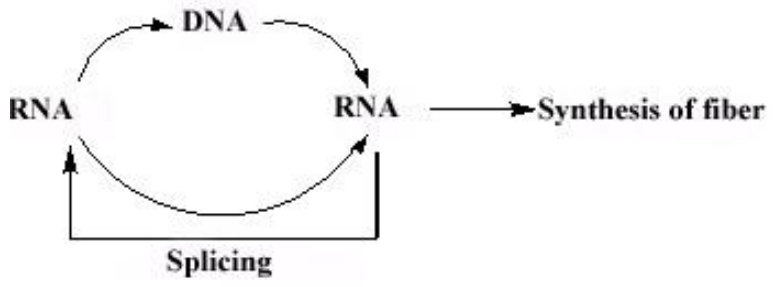
However we [3-7] publish a series of works where the experimental proofs denying the standard central dogma of molecular biology have been presented. In particular, in the patent of the Russian Federation (1997) we[3] revealed at studying of influence N-replaced oxipiridin for speed of synthesis of DNA and RNA in tumoral cells of line of carcion ovary of person Caγ is registered: practically at full oppression of synthesis of DNA there is a simultaneous stimulation of synthesis of RNA up to 214 % concerning a control parameter (figs. 1).

In politent chromosomes of skilled low mutant drosophila D-32, fed unitary with N-phenyl-3-oxipiridin in 4-th chromosome intensively functioning sites in the field of $КБ_1$ and $КБ_2$ are found out. Other three long chromosomes contain a little huge puphs actually passing in nucleus. These morphogenetic characteristics testify also of intensive synthesis information RNA under influence of investigated connection.

The experimental results received by us allow apparently to conclude that the investigated N-replaced salts of 3-oxipiridin render significant influence on activation of RNA-polymerase. In particular this activation is shown in amplification and duplication of a copy semantic in norm of RNA-transcripts.

Significant influence in vivo on processes of "editing" at the higher animals, i.e. occurrences of the big genetic information in molecules of RNA than it has been coded in initial molecules of DNA, also testifies to influence of investigated connections on splicing mechanisms.

Thus, from the above-stated experimental material it is possible to conclude that the direction of distribution of the genes information occurs on the mechanism of return central dogma of molecular genetics from RNA to DNA where on a matrix information мRNA synthesis of fiber at the maximum animals from one generation to another during embryogenesis is carried out



The role of RNA in inheritance of features was proved in higher plants and animals. Though inheritance of high percent of posterity with white spots on paws and a tail in mice with normal genotype Kit $^{+/+}$ at various genetic variations on crossing with each other of wild genotype Kit $^{+/+}$ (responsible, besides other, for formation of a dark pigment of melanin) with heterozygote (genotype Kit$^{+/-}$) and homozygous (Kit$^{-/-}$) animals, cannot serve as the unequivocal proof of role of RNA as matrixes in transferring of the genetic information to posterity. It is not excluded, that duplication of a copy of mutant post RNA - transcripts is defined supervised) both overlapping Kit with other genes, and other factors.

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