

TABLE OF CONTENTS

ACTIVITIES AND PROSPECTS

STATE INSTITUTION «NATIONAL RESEARCH CENTER FOR RADIATION MEDICINE OF THE NATIONAL ACADEMY OF MEDICAL SCIENCES OF UKRAINE» – RESEARCH ACTIVITIES AND SCIENTIFIC ADVANCE IN 2018	10
D. Bazyka, V. Sushko, A. Chumak, P. Fedirko, V. Talko, L. Yanovych	

REVIEWS

NEUROENDOCRINE EFFECTS OF PRENATAL IRRADIATION FROM RADIOACTIVE IODINE (review)	20
K. M. Loganovsky, V. V. Talko, O. V. Kaminskyi, D. E. Afanasyev, S. V. Masiuk, T. K. Loganovskaya, G. Y. Lavrenchuk	
PROBLEMS OF RADIO SAFETY OF THE POPULATION OF THE ZAPORIZHZHIA REGION WHICH RELATES TO EXPOSURE TO BASIC SOURCES (by review of the literature)	53
A. I. Sevalnev, A. V. Kutsak, I. A. Sokolovska	
RADIATION-INDUCED BYSTANDER EFFECT – MODELING, MANIFESTATION, MECHANISMS, PERSISTENCE, CANCER RISKS (literature review)	65
O. V. Shemetun, M. A. Pilinska	

EPIDEMIOLOGY AND DOSIMETRY

EVALUATION OF MAIN FOODSTUFFS CONSUMPTION BY RESIDENTS OF PARTICULAR SETTLEMENTS ON RADIOLOGICALLY CONTAMINATED TERRITORIES OF UKRAINE	93
V. V. Vasylenko, G. M. Zadorozhna, M. S. Kuriata, L. O. Lytvynets, D. V. Novak, L. P. Mishchenko	
ANALYSIS OF POPULATION SIZE AND COMPOSITION IN AREAS WITH THE MOST INTENSIVE RADIOLOGICAL CONTAMINATION IN UKRAINE AT DIFFERENT TIMES	109
N. V. Gunko, N. V. Korotkova, Ya. Yu. Zasoba	
THE CONTENT OF NATURAL RADIONUCLIDES IN TECHNOLOGICAL RESIDUES OF UKRAINIAN INDUSTRIES	121
T. Pavlenko, N. Aksenov, M. Fryziuk	
IMPACT OF THE RIVNE NPP ACTIVITY ON NATURAL AND SOCIAL ENVIRONMENT OF THE CONTROL AREA	131
V. A. Prylypko, M. M. Morozova, I. V. Bondarenko, O. O. Petrychenko, O. M. Romanenko, K. K. Tuz, Yu. Yu. Ozerova	
EPIDEMIOLOGY OF BREAST CANCER IN UKRAINE WITH CONSIDERATION OF THE FACTORS OF THE CHORNOBYL ACCIDENT	150
A. Ye. Prysyzhnyuk, D. A. Bazyka, A. Yu. Romanenko, Z. P. Fedorenko, M. M. Fuzik, N. A. Gudzenko, N. K. Trotsyuk, L. O. Gulak, E. L. Gorokh, A. Yu. Ryzhov, O. M. Khuryanskaya, S. A. Danevich	
THE INCIDENCE OF MULTIPLE MYELOMA IN THE DNIPROPETROVSK REGION	169
I. O. Selina, O. O. Yarchuk, P. Yu. Kaplan, G. V. Usenko, IV. V. Sidorenko, I. S. Dyagil	
DETERMINATION OF THE PATIENTS' EFFECTIVE DOSES FOR MOST COMMON X-RAY EXAMINATIONS BY PHANTOM SIMULATION	180
L. L. Stadnyk, O. V. Nosyk	
INVESTIGATION OF RADIATION BACKGROUND IN THE MICRODISTRICTS OF KROPYVNYTSKYI USING DOSIMETER-RADIOMETER MKS-08-01 Gm «DKS-96» AND WIRELESS SENSORS	195
L. P. Sukhovirska, O. M. Lunhol, D. V. Somenko, K. V. Humeniuk	

EXPERIMENTAL RESEARCH

ASSESSMENT OF RADIOPROTECTIVE ACTION OF BASIDIOMYCOTIC MELANIN PIGMENTS ON THE HEMATOPOIETIC SYSTEM OF Balb/C MICE UNDER EXPOSURE TO IONIZING RADIATION IN SUBLETHAL DOSE	210
D. I. Bilko, I. Z. Russu, N. M. Bilko	
INDUCED POLYPLOIDY AND SORTING OF DAMAGED DNA BY MICRONUCLEATION IN RADIORESISTANT RAT LIVER EPITHELIAL STEM-LIKE CELLS EXPOSED TO X-RAYS	220
B. I. Gerashchenko, K. Salmina, J. Krigerts, J. Erenpreisa, A. M. Babsky	
THE DEPENDENCE OF DOSE-EFFECTS IN HUMAN RADIATION CYTOGENETICS	235
E. A. Djomina	
TISSUE IMMUNE CELLS AND THEIR ROLE IN THE HEALING PROCESS OF INFECTED RADIATION ULCERS UNDER THE IMPACT OF PHOTODYNAMIC THERAPY (EXPERIMENTAL STUDY)	250
M. V. Krasnoselsky, L. I. Simonova., V. Z. Gertman, E. S. Pushkar, T. S. Zavadskaya	
INFLUENCE OF COMBINED ACTION OF X-RADIATION AND CYCLOOXYGENASE-2 – MELOXIVET INHIBITOR ON VEGF AND PGE-2 CONTENT IN BLOOD OF RAT-TUMOR CARRIERS	261
N. A. Mitryayeva, L. V. Grebinyk, N. E. Uzenkova	
EFFECT OF ADDITIONAL ACUTE IRRADIATION ON CYTOMORPHOLOGICAL ABNORMALITIES OF ERYTHROCYTES OF THE PRUSSIAN CARP (<i>CARASSIUS GIBELIO</i> BLOCH) FROM WATER BODY CONTAMINATED WITH RADIONUCLIDES	270
N. A. Pomortseva, D. Gudkov	

CLINICAL RESEARCH

THE REPRODUCTIVE HEALTH OF THE FEMALE RESIDENTS IN THE AREAS OF UKRAINE AFFECTED BY THE RADIOACTIVE CONTAMINATION (2007–2017)	284
Yu. G. Antypkin, N. Ye. Gorban, O. Yu. Borysiuk, O. V. Lynchak	
RADIOTHERMOMETRIC PERSONALISATION OF CHEMO- AND RADIOTHERAPY FOR PATIENTS WITH ADVANCED (III, IVA AND IVB) STAGES MALIGNANT LESIONS OF ORAL CAVITY, THROAT AND EPIGLOTTIS	296
D. Bazyka, M. Vorobyov, I. Kechyn, O. Vorobyov, O. Shmykova	
ANALYSIS OF STRUCTURAL AND FUNCTIONAL PARAMETERS OF THE THYROID GLAND IN PATIENTS WITH MALIGNANT BREAST TUMORS, WHO SUFFERED FROM THE CHORNOBYL ACCIDENT	312
D. A. Basyka, O. O. Lytvynenko, S. G. Bugaicov, G. F. Shakhrai, I. I. Daniluk	
FEATURES OF CLINICAL SYMPTOMS AND SIGNS, HEMATOLOGICAL AND BIOCHEMICAL PARAMETERS IN CHILDREN WITH JOINT HYPERMOBILITY IN A LATE PERIOD UPON THE CHORNOBYL NPP ACCIDENT	322
V. G. Bebeshko, K. M. Bruslova, T. T. Volodina, L. O. Lyashenko, N. M. Tsvetkova, I. V. Trychlib, T. O. Chernysh, V. G. Boyarskiy, L. O. Gonchar, N. V. Kavardakova	
PROGNOSIS OF THE COURSE OF CHORNOBYL-ORIGINATED ACUTE LYMPHOBLASTIC LEUKEMIA IN CHILDREN IN UKRAINE DEPENDING ON THE REASON OF STANDARD CHEMOTHERAPY INTERRUPTION	335
V. G. Bebeshko, K. M. Bruslova, N. M. Tsvetkova, L. O. Lyashenko, T. I. Pushkariova, L. O. Gonchar, I. V. Tryhlib, S. M. Yatsemirskiy, Yu. M. Samson, V. G. Boyarskiy, K. V. Grischenko, V. M. Polyanska, I. V. Dmytrenko	
THE DEVELOPMENT OF HYPERTENSION DISEASE AND ISCHEMIC HEART DISEASE IN EMERGENCY WORKERS OF THE CHORNOBYL ACCIDENT AND INFLUENCE ON IT CONDITIONS OF BEING UNDER RADIATION	350
D. Belyi, O. Nastina, G. Sydorenko, N. Kursina, O. Bazyka, Z. Gabulavichene, O. Kovaliov	
COMPARATIVE CHARACTERISTICS OF SPERMOGRAPHIC INDICATORS IN IDIOPATHIC FORMS OF INFERTILITY IN MEN FROM RADIOACTIVELY CONTAMINATED AND CONVENTIONALLY CLEAN REGIONS OF UKRAINE	367
I. Gorpynchenko, Yu. Gurzhenko, V. Spyrndonenko, E. Lytvynets	
HYPERPARATHYROIDISM AND PARATHYROID LESIONS IN THE ChNPP ACCIDENT SURVIVORS	380
O. V. Kaminskyi, O. V. Kopylova, D. E. Afanasyev, K. M. Loganovsky, V. V. Talko, I. M. Muraveva, I. G. Chikalova, O. V. Tepla, I. O. Kiseliova, N. V. Bryliova, K. O. Gryschenko, L. O. Tsvet, O. Ya. Pleskach	

STATE OF COGNITIVE FUNCTIONS IN CHILDREN WITH PATHOLOGY OF DIGESTIVE ORGANS, WHO LIVE AT RADIOACTIVE CONTAMINATED TERRITORIES OF UKRAINE	395
L. M. Lisukha, I. Ye. Kolpakov	
CYTOGENETIC DAMAGES IN LUNG CANCER PATIENTS TREATED BY EXTERNAL RADIATION THERAPY	411
N. Maznyk, T. Sypko., V. Starenkiy, N. Bohatyrenko, N. Bilozor	
IMMUNOGENETIC AND PHARMACOCHEMICAL CHARACTERIZATION OF THE ABO SYSTEM GLYCOPROTEIN PROPERTIES AS CRITERIA OF INDIVIDUAL SENSITIVITY TO ANTITUMOR AGENT BORTEZOMIB IN THE PLASMA CELL MYELOMA PATIENTS	426
Zh. M. Minchenko, A. D. Kustovska, S. V. Prymachenko, O. O. Dmytrenko, T. F. Liubarets, T. Yu. Shlyachtchenko ¹ , V. V. Balan, V. G. Bebeshko	
APPLICATION OF ART THERAPY FOR CORRECTION OF PERSONAL DISORDERS OF PSYCHOEMOTIONAL STATE OF CHILDREN – INHABITANTS OF RADIATION POLLUTED TERRITORIES AND CHILDREN DISPLACED FROM THE ARMED CONFLICT ON THE SOUTHERN EAST OF UKRAINE	439
V. A. Poznysh, V. Yu. Vdovenko, I. E. Kolpakov, E. I. Stepanova	
IL-10 IS DOWN-REGULATED IN THE CARDIOVASCULAR DISEASES SUSPECTED PATIENTS, INDEPENDENT OF ANGIOGRAPHY	449
S. Razavi, F. Ahmadi-Roknabadi, M. Safarian, A. Mehdipour, A. Anbarian, M. Mirzamohammadi, M. Zeinali, M. Kazemi Arababadi	
MUTATIONS OF GENES <i>BRCA1</i> AND <i>BRCA2</i> IN WOMEN WITH OVARIAN CANCER EXPOSED TO FACTORS OF CHORNOBYL NUCLEAR ACCIDENT	455
L. A. Rybchenko, L. O. Poluben, G. M. Bychkova, G. V. Stephanovych, S. V. Klymenko	
RETROSPECTIVE ASSESSMENT OF CLINICAL-MORPHOLOGICAL CHANGES OF THE HEPATOBILIARY SYSTEM IN LIVER CIRRHOSIS OF THE CHORNOBYL NPP ACCIDENT CLEAN-UP WORKERS	465
E. O. Sarkisova, V. O. Sushko, A. A. Chumak, L. M. Ovsyannikova, O. V. Nosach, S. M. Alyokhina, T. O. Shyiko	
FUNCTION OF EXTERNAL RESPIRATION AND MARKERS OF OXIDATIVE STRESS IN CHILDREN-RESIDENTS OF RADIOACTIVELY CONTAMINATED TERRITORIES	480
Ye. I. Stepanova, I. Ye. Kolpakov, S. M. Al'okhina, V. Yu. Vdovenko, V. M. Zyhalo, O. S. Leonovych	
CLINICAL TYPES OF CATARACTS IN A LONG-TERM PERIOD AFTER ACUTE RADIATION SICKNESS	493
P. A. Fedirko, T. F. Babenko, O. O. Kolosynska, R. E. Dorichevska, N. A. Garkava, V. O. Sushko	
LUNG FUNCTION AND TELOMERE RELATIVE LENGTH IN CLEAN-UP WORKERS OF CHORNOBYL NPP ACCIDENT IN A REMOTE POST-ACCIDENT PERIOD	503
L. I. Shvaiko, K. D. Bazyka, V. O. Sushko, I. M. Ilienکو, D. A. Bazyka	
CASE RECORDS	
CLINICAL CASE OF CUTANEOUS T-CELL LYMPHOMA IN A PATIENT WHO GOT INJURED AFTER THE DISASTER ON CHORNOBYL NUCLEAR POWER PLANT	516
L. V. Hrechanska, L. D. Kaliuzhna, P.V. Fedorych, A.V. Petrenko	
HIRUDOTHERAPY IN <i>PRESBYACUZIS PRAECOX</i> IN CLEAN-UP WORKERS AFTER THE CHORNOBYL ACCIDENT DURING THE POST-CATASTROPHE YEARS	522
D. I. Zabolotnyi, N. S. Mishchanchuk	
BILATERAL AVASCULAR NECROSIS OF SACRAL LATERAL MASSES AFTER A COMPLETE RADIOLOGICAL RESPONSE OF LOCALLY ADVANCED RECTAL CANCER TREATED WITH NEOADJUVANT CHEMORADIATION THERAPY. CASE REPORT	538
V. V. Zvirych, D. E. Makhmudov, M. I. Paliy, A. V. Ashykhmin, O. O. Kolesnik	
SURGICAL TREATMENT RESULTS IN PATIENTS WITH PELVIC BONE TUMORS IN CASES OF PREOPERATIVE 3D MODELING USE	553
V. Yu. Kostyuk, A. G. Diedkov, I. A. Lazarev, B. V. Maksymenko, S. I. Boichuk	
THE USAGE OF RADIOFREQUENCY ABLATION FOR TREATMENT OF KELOIDS AND HYPERTROPHIC SCARS	562
V. Teplyi, K. Grebchenko	
INSTRUCTIONS FOR AUTHORS	580